INPUT

VENDOR ANALYSIS PROGRAM

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

January 1997

American Software, Inc.

President & CEO: James C. Edenfield
470 East Paces Ferry Road
Atlanta, GA 30305
Phone: (404) 264-5296
Fax: (404) 264-5394
Internet: http://www.amsoftware.com



Status:	Public
Employees:	592 (1/97)
Revenue:	$77,557,085
Fiscal Year End:	4/30/96

Key Points

- American Software provides enterprise-wide Supply Chain Management™ business applications software and associated support services for a range of IBM and compatible mainframe, midrange, Windows, and UNIX open client/server systems.
- Supply Chain Management—the business model of the future—allows customer orders, inventory levels, purchase orders and other key information to flow automatically from one business to another, shortening cycle times, reducing inventory, enhancing customer service and loyalty, and increasing quality, productivity, profitability, and return on investment.
- In January 1997, American Software announced the formation of Logility, Inc., a wholly owned subsidiary for its Supply Chain Planning (SCP) open, client/server solutions, its fastest growing business.
- In March 1996, American Software purchased a manufacturing planning product (Production Scheduling Advisor), further enhancing its SCP product line. The company has also Internet enabled SCP.
- American Software has acquired a majority ownership in Intellimedia Commerce, Inc., a venture providing Internet business

© INPUT 1997. Reproduction prohibited

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

applications and corporate home page design and support.

Company Description

American Software develops, markets and supports multiplatform enterprise-wide Supply Chain Management applications software products across a wide range of industries.

- The company's product line encompasses integrated business applications in the areas of supply chain planning, warehouse management, manufacturing, purchasing and customer order processing, and financial control.

- The company also provides customer education and training, consulting and custom development professional services, and systems operations (outsourcing).

Organization and Structure

American Software is organized into the following divisions/units:

- Midrange Division
- Client/Server Division
- Customer Services
- Outsourcing Services (AmQuest)
- Professional Services
- Alliance Programs
- International Operations

- AmQuest™, Inc., based in Atlanta (GA), provides outsourcing, transaction processing, and electronic commerce-related services.

- AMEDIA, Inc., based in Atlanta (GA), is a wholly owned subsidiary providing CD ROM technology.

- ASI Properties, based in Atlanta (GA), manages American Software's various properties.

- Distribution Sciences, Inc., based in Des Plaines (IL), is a wholly owned subsidiary providing transportation management software.

- Intellimedia Commerce, Inc., based in Atlanta, is a wholly owned subsidiary focusing on developing, hosting, and maintaining Internet-based solutions for both business and consumer markets.

- The Proven Method, based in Atlanta (GA), was formed as a wholly owned subsidiary in April 1995 to provide contract consulting services to information systems organizations.

- Logility, Inc. is a wholly owned subsidiary formed in January 1997 to manage SCP solutions.

 - The new company is a dedicated organization that develops, markets, sells, installs, and supports new solutions exclusively for the SCP market.

 - American Software is also evaluating the possible sale of a portion of the new company to the public.

In order to move its sales and client support services closer to its customers, American Software has organized into seven global areas—Mid-America, Northeast, Southern, Western, Canada, Europe/Middle East/Africa, and Asia-Pacific. World headquarters are in Atlanta (GA). Area headquarters and associated support offices are as follows:

- Northeast U.S.—Headquartered in Tarrytown (NY), with additional offices in Braintree and Wayne (PA)

- Southern U.S.—Headquartered in Atlanta (GA), with additional offices in Irving (TX) and Raleigh (NC)

© INPUT 1997 Reproduction prohibited.

- Mid-America U.S.—Headquartered in Rosemont (IL) with an additional office in Eden Prairie (MN)
- Western U.S.—Headquartered in Costa Mesa (CA) with an additional office in Tiburon (CA)
- Europe/Middle East/Africa—Dual headquarter offices in London (England) and Paris (France)
- Asia-Pacific—Headquartered in Singapore
- Canada—Headquartered in Markham (Ontario)

American Software also has agents in Belgium, Germany, Ireland, Italy, the Netherlands, Switzerland, Turkey, Bahrain, India, Kuwait, South Africa, Singapore, Australia, Japan, and Malaysia.

Company Strategy

American Software's long-range strategy is to extend the functionality of supply chain management to help speed information, communication, and production along each component of the supply chain.

American Software's goals are to:

- Establish American Software as the world leader in Supply Chain Management solutions
- Capture technology leadership by providing solutions that customers want on the platforms they need
- Strengthen its commitment to customer satisfaction around the globe
- Put the right people in the right places
- Create strong global alliances
- Provide solid leadership with financial success

Strategies the company is implementing to achieve these goals include:

- Refocusing and restructuring sales and client support services closer to customers so as to be more responsive to their needs
- Reengineering its software solutions to open, client/server platforms to provide customers with a range of hardware platforms
- Using model-driven I-CASE tools and object-oriented technology
- Developing business alliances with such vendors as Synon, Oracle, Sybase, HP, IBM, Sequent, and Big 6 and other consulting firms

Financials

American Software's fiscal 1996 revenue was $77.6 million, a 2% decrease from fiscal 1995 revenue of $79.4 million. Net losses were $9.7 million in fiscal 1996, compared to net losses of $6.7 million in fiscal 1995.

A five-year financial summary is shown on the following page.

A three-year source of revenue summary is also shown on the following page.

© INPUT 1997 Reproduction prohibited.

American Software, Inc.
Five-Year Financial Summary
($ Millions, except per-share data)

	Fiscal Year				
Item	4/96	4/95	4/94	4/93	4/92
Revenue	$77.6	$79.4	$94.2	$106.8	$113.1
• Percent change from previous year	(2%)	(16%)	(12%)	(6%)	11%
Income (loss) before taxes	$(12.8)	$(11.3)	$(11.7)	$6.7	$27.9
• Percent change from previous year	(12%)	3%	(275%)	(76%)	4%
Net income (loss)	$(9.7)	$(6.7)	$(6.6)	$5.1	$18.6
• Percent change from previous year	(46%)	(2%)	(229%)	(73%)	6%
Earnings (loss) per share	$(0.44)	$(0.30)	$(0.30)	$0.23	$0.80
• Percent change from previous year	(47%)	--	(230%)	(71%)	7%

American Software, Inc.
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	4/96		4/95		4/94	
Product/Service	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Software license fees	$24.1	31%	$20.8	26%	$31.1	33%
Maintenance services	22.8	29%	$22.6	28%	21.6	23%
Professional services	20.4	27%	$26.8	34%	35.5	38%
Systems operations	10.3	13%	$9.2	12%	6.0	6%
Total	$77.6	100%	$79.4	100%	$94.2	100%

- Software license fee revenues increased 16% to $24.1 million during fiscal 1996. Supply Chain Management license fee revenue grew 151% during the year. During the last six months of the year, license fees for the older technology products declined sharply.
- Service revenue, which consists of consulting and custom programming professional services and outsourcing revenues, decreased 15% to $30.7 million due to a 24% decrease in professional services. This decrease was partially offset by a 12% increase in outsourcing revenue.

© INPUT 1997. Reproduction prohibited.

- Maintenance revenue increased 1% to $22.8 million. The growth in maintenance has slowed over the last three years due primarily to the decrease in software license fees that serve as the source of new maintenance customers.

A three-year summary of source of software license revenue by operating platform is shown below.

	Software License Revenue ($ Millions)		
Hardware Platform	4/96	4/95	4/94
Mainframe	$6.6	$5.2	$16.3
Midrange	6.5	7.3	7.7
Client/server	11.0	8.3	7.1
Total	$24.1	$20.8	$31.1

Interim Results

Revenue for the six months ending October 31, 1996 was $38.1 million, a 10% decrease from $42.4 million for the same period in 1995. Net losses were $759,000, compared to net income of $778,000 for the same period a year ago.

- Overall license fee revenue declined 19% to $12.4 million, with newer client/server products accounting for 60% of total license fee revenue.

- Services revenue declined 5% to $15 million, due to continued declines in consulting and customization revenue resulting from a steady decrease in older technology software sales (largely mainframe software).

- Maintenance revenues declined 10% to $10.7 million, due to reduced license fees.

Market Financials

American Software markets and supports its Supply Chain Management applications software products to a range of users, including manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel, and textiles, as well as retail and wholesale traders, financial institutions, the health services industry, petroleum producers, public utilities, and the transportation industry.

Geographic Markets

Approximately 86% of American Software's fiscal 1996 revenue was derived from the U.S. and 14% from international sources.

A three-year summary of geographic sources of revenue appears on the following page.

Acquisitions

In March 1996, American Software acquired the Production Scheduling Advisor software group from Stone & Webster Advanced Systems Development Services, Inc. (ASDS).

- American Software has integrated Stone & Webster's Production Scheduling Advisor (PSA) finite capacity and material planning system into American Software's Supply Chain Planning demand planning and replenishment system.

- PSA will also continue to be sold as an independent product.

In January 1996, American Software purchased 60% of Intellimedia Commerce, Inc. for $850,000. Intellimedia builds and maintains systems for commerce on the Internet. The acquisition expands American Software's capacity to strengthen supply chain relationships via the Internet.

© INPUT 1997 Reproduction prohibited.

American Software, Inc.
Three-Year Geographic Source of Revenue Summary
($ Millions)

	Fiscal Year					
	4/96		4/95		4/94	
Geographic Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
U.S.	$67.0	86%	$69.2	87%	$77.8	83%
International (a)	10.6	14%	10.3	13%	16.4	17%
Total	$77.6	100%	$79.5	100%	$94.2	100%

(a) Primarily from customers in Canada, Europe, Australia, and Asia

In March 1995, American Software acquired 30% of the equity of Txbase Systems, Inc. American Software received marketing rights for the Txbase suite of software products and has the option to increase its equity position to 50% of Txbase.

- Txbase is an Ontario, Canada-based provider of client/server applications software.
- Txbase software products include manufacturing, distribution, and financial modules developed for open systems architecture using (principally) Sybase relational database technology.

Employees

As of April 30, 1996, American Software had 610 full-time employees, segmented as follows:

Sales and sales support	108
Marketing	18
Customer support and professional services	180
Product development and technical support	264
Accounting and administration	40
	610

The company currently has approximately 592 employees.

Key Products and Services

American Software's solutions focus on the entire supply chain, from raw material through final consumption.

Software Products

American Software's products are designed to be used either individually or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- Products are available primarily for UNIX (HP 9000, IBM RS/6000, and other UNIX), Windows (Windows 3.1, Windows NT, and OS/2), and IBM midrange systems (AS/400) platforms. Software is also available for IBM and compatible mainframes.
- The products are written in various standard programming languages used for business applications software, including ANS COBOL, COBOL II, Micro Focus COBOL, and C and many have both on-line and batch capabilities.

© INPUT 1997. Reproduction prohibited.

- The company has integrated PCs as workstations or clients into its products.

American Software products are summarized in the exhibit on the following page. These applications support the three major business process areas necessary to manage today's supply chain—planning, execution, and measurement.

- Planning systems focus on having the right product at the right place at the right time. Demand and Replenishment Planning is central to this function.

- Execution systems facilitate the actual movement of products and information through a supply chain. Customer Order Fulfillment, Procurement, Manufacturing, and Transportation Management solutions are tightly integrated and EDI enabled to enhance the supply chain communication process.

- Measurement functions analyze and control financial and operational performance. This process is supported by many of American Software's products, including its Financial Management applications.

- The company's K2 product line encompasses Year 2000-enabled solutions, including software, maintenance renewals, and customization services.

Recently released tools/products include the following:

- Resource ChainVoyager™ is an Internet-based collaborative SCP tool that enables collaborative forecasting and replenishment using the Internet. By using Netscape Navigator or Microsoft Explorer, customers, suppliers, distributors, and other supply chain trading partners can access Resource Chain Voyager's capabilities to track demand and manage replenishment.

- The Flow Manufacturing™ system for just-in-time manufacturing environments is available for UNIX and AS/400 systems and features enhanced functionality that allows it to bond a product to specific customer demand while eliminating unnecessary activities related to costing, scheduling, and production.

- WarehouseP&RO is a client/server managed warehouse system especially suited for multisite warehouses, especially in the manufacturing, distribution, and utilities industries. It automates all aspects of a system-managed warehouse and contains support for automated bar coding and RF technologies.

- American Software has Internet enabled its SCP solutions to link departments, customers, and suppliers and create interactive information sharing to reduce cycle time and synchronize production on demand.

American Software's Supply Chain Management solution includes a variety of application templates for integrating technologies such as radio frequency scanners, interactive voice response, optical character recognition, image processing, and EDI. ADC-P&RO is a client/server-based product that integrates data collection applications such as bar coding, automated storage/retrieval systems, automated item pickers, electronic scales, program logic controllers, and shop floor devices.

© INPUT 1997 Reproduction prohibited.

Exhibit

American Software Products

Application Area/Product Name	Application Area/Product Name
Supply Chain Planning	**Warehouse Management**
- Demand Forecasting	- Receiving
- Distribution Requirements Planning	- Setup and Administration
- Inventory Planning	- Product Storage
- Manufacturing Planning	- Picking and Shipping
- Continuous Replenishment	**Financial Control**
- Event Planning	- General Ledger and Budgeting
- Internet Voyager™	- Accounts Receivable
Purchasing & Customer Order Processing	- Accounts Payable
- Inventory Control and Accounting	- Capital Project Accounting
- Purchasing	- Fixed Asset Accounting
- Material Request	- Continuing Property Records
- Item Information Management	**Transportation Management**
- Bid (Request for Quotation)	- Preshipment Planning®
- Customer Order Processing	- Carrier Select™
Manufacturing	- Match Pay™
- Master Scheduling	- Base Rate®
- Material Requirements Planning	**Applied Technologies**
- Bill of Material	- Automated Data Collection
- Capacity Planning	- Electronic Data Interchange
- Production Order Status	- Interactive Voice Response
- Route and Work Center Maintenance	- Executive Information System
- Shop Floor Control	- Decision Support Systems
- CMAT	- Image Processing
- Flow Manufacturing	- Optical Character Recognition
	- Knowledge-Based Systems

© INPUT 1997 Reproduction prohibited.

The company also offers the AMSOFT™ family of productivity tools.

Professional Services

American Software's Client Services include application business consulting, technical consulting, education and training, project management, and ongoing support services.

The Proven Method, a wholly owned subsidiary, provides contract consulting services to information systems organizations. The company supplies additional resources to augment current staff and provides technical talent for organizations that have minimal experience with new technologies. As companies make the transition from legacy systems, The Proven Method can also provide technical resources to maintain the legacy system while developing new systems.

Outsourcing

American Software provides systems operations services to approximately 20 clients on terms of up to five years. These services are now provided by the company's AmQuest, Inc. subsidiary.

Clients

Software license clients include Lone Star Gas, GTE Telephone, The Clorox Corporation, Timex, Fast Food Merchandisers, UPS, Advanced Transformer, Indiana Gas, British Telecom, Sigma Aldrich, Porsche Cars, Jacksonville Electric Authority, Bausch & Lomb, United Design Corporation, Procter & Gamble, Chiquita Brands International, Inc., Lockheed Martin, Warner-Lambert Company, Sears Roebuck and Co., Michelin Tire Corporation, American Standard, Nestle, Acromed, Springs Window Fashions Division, and Jerome Foods.

Outsourcing clients include Oglethorpe Power Corporation, Borg-Warner Security Corporation, and Dixie Yarns.

Marketing and Sales

American Software sells its products directly to users through its sales staff of 105 persons located in six areas worldwide—Mid-America (23), Northeast (18), Southern (31), Western (10), Canada (4), Europe (10), and Asia-Pacific (9).

American Software is continuing a program begun in 1988 to develop a network of sales agents to support sales internationally.

American Software also has joint marketing arrangements with a number of other software and hardware manufacturers under which each party seeks to market its own products or services in conjunction with products or services of the other party.

Alliances

In October 1996, American Software's SCP unit signed a partnership agreement with PeopleSoft.

- Each company will actively promote PeopleSoft and SCP products as complementary supply chain solutions. This agreement includes mutual referral of sales leads, catalog and other collateral listings, user group demonstrations, and other marketing activities.

- SCP software (forecasting, demand planning, inventory planning) will supplement PeopleSoft's Enterprise and Production Planning products to provide an end-to-end supply chain solution, from forecasting to manufacturing.

In August 1996, American Software expanded its list of international business partners by signing Real Software (NI)

© INPUT 1997 Reproduction prohibited.

Limited to provide supply chain planning and management solutions in Ireland.

Intellimedia Commerce, Inc. is a joint venture formed in 1996 between American Software, Intellimedia Sports, and Cox Enterprises. Its focus is on developing, hosting, and maintaining Internet-based solutions for both business and consumer markets.

Rijnhaave American, Inc. is a joint venture company formed in July 1995 between American Software and Rijnhaave Information Systems to provide information systems consulting, network configuration and management, transaction processing, systems support, and other data center services. This venture allows both companies to consolidate efforts and expand the scope of their facilities management capabilities.

American Software is a member of Oracle's Cooperative Applications Initiative program. American Software's SCP solutions are being integrated with Oracle Cooperative Applications.

American Software and systems integrator Syntegra (U.K.) have a strategic alliance whereby Syntegra will incorporate American Software products as part of an integrated solution to multinational and large national corporations.

American Software also has joint marketing/partner agreements with a number of software and hardware vendors, including Cognos, Computer Associates, Data Management Services (Damas), Distribution Logistics & Management, Hewlett-Packard, IBM, Information Builders, Intermec Corporation, Interactive Images, LX, Seagull Software, Synon, Systecon, Syntellect, Txbase Systems, Telxon, Deloitte & Touche, Price Waterhouse, Ernst & Young, EDS, Sterling Software, Software AG of North America, Sequent Computer Systems, and Sybase.

Competitors

Major competitors include Geac Computer (D&B Software), Computer Associates, SAP, Manugistics, and J.D. Edwards.

Assessment

American Software's strengths include:

- Supply chain management expertise
- Flow manufacturing products
- Introduction of client/server products
- Customer base
- Financial strength

The company's main challenge is to overcome its declining software license revenue and return to profitability.

© INPUT 1997 Reproduction prohibited.

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

February 1996

American Software, Inc.

President & CEO: James C. Edenfield
470 East Paces Ferry Road
Atlanta, GA 30305
Phone: (404) 264-5296
Fax: (404) 264-5394



Status:	Public
Employees:	640 (2/96)
Revenue:	$79,461,652
Fiscal Year End:	4/30/95

Key Points

- American Software provides enterprise-wide Supply Chain Management™ business applications software and associated support services for a range of IBM and compatible mainframe, midrange and UNIX open client/server systems.
- Supply Chain Management—the business model of the future—allows customer orders, inventory levels, purchase orders and other key information to flow automatically from one business to another, shortening cycle times, reducing inventory, enhancing customer service and loyalty and increasing quality, productivity, profitability and return on investment.
- For the six months ending October 31, 1995, American Software recorded a profit of $777,000, a dramatic improvement over net losses of $5.8 million for the same period a year ago. During the past several years, the company has made significant investments in research and development to develop new open, client/server supply chain management solutions and reengineer existing products.
- In January 1996, American Software announced it had placed its operations associated with outsourcing, transaction processing and electronic commerce into a

© INPUT 1996. Reproduction prohibited.

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

newly formed and wholly owned subsidiary named Amquest, Inc.

- During 1995, the company introduced a range of its next-generation open, client/server solutions, including Supply Chain Planning, a GUI-based front-end, and a warehouse management system.

Company Description

American Software develops, markets and supports multiplatform enterprise-wide Supply Chain Management applications software products across a wide range of industries.

- The company's product line encompasses integrated business applications in the areas of logistics distribution, manufacturing, purchasing and customer order processing and financial control.

- The company also provides customer education and training, consulting and custom development professional services and systems operations (outsourcing).

Organization and Structure

American Software is organized into the following divisions/units:

- Midrange Division
- Client/Server Division
- Customer Services
- Outsourcing Services (Amquest)
- Professional Services
- Alliance Programs
- International Operations

- Amquest, Inc. provides outsourcing, transaction processing and electronic commerce-related services.

- AMEDIA, Inc., based in Atlanta (GA), is a wholly owned subsidiary providing CD ROM technology.

- ASI Properties, based in Atlanta (GA), manages American Software's various properties.

- Distribution Sciences, Inc., based in Des Plaines (IL), is a wholly owned subsidiary providing transportation management software.

- The Proven Method, based in Atlanta (GA), was formed as a wholly owned subsidiary in April 1995 to provide contract consulting services to information systems organizations.

In order to move its sales and client support services closer to its customers, American Software has organized into seven global areas—Mid-America, Northeast, Southern, Western, European, Canada and Asia-Pacific. World headquarters are in Atlanta (GA). Area headquarters and associated support offices are as follows:

- Northeast U.S.—Headquartered in Tarrytown (NY), with additional offices in Quincy (MA), Wexford and Wayne (PA)

- Southern U.S.—Headquartered in Atlanta (GA), with additional offices in Irving (TX) and Raleigh (NC)

- Mid-America U.S.—Headquartered in Rosemont (IL) with additional offices in Livonia (MI), Prairie (MN) and Chesterfield (MO)

- Western U.S.—Headquartered in Costa Mesa (CA), with additional offices in Bellingham (WA), Littleton (CO) and Tiburon (CA)

- Europe—Headquartered in London (England), with an additional office in Paris

© INPUT 1996. Reproduction prohibited.

- Asia-Pacific—Headquartered in Singapore, with an additional office in Japan
- Canada—Headquartered in Markham (Ontario)

American Software also has agents in the U.K., Belgium, Italy, Bahrain, Singapore, Australia, Indonesia, Japan, Malaysia, the Philippines Egypt, India, South Africa, Switzerland, Turkey, Korea and Thailand.

Company Strategy

American Software's strategy is to create an integrated line of standard applications software operating on three strategic computer platforms—IBM and compatible mainframes, IBM midrange (AS/400) and UNIX (IBM RS/6000, HP 9000, Sequent and other UNIX) platforms.

American Software's goals are to:

- Establish American Software as the world leader in Supply Chain Management solutions
- Capture technology leadership by providing solutions customers want on the platforms they need
- Strengthen its commitment to customer satisfaction around the globe
- Put the right people in the right places
- Create strong global alliances
- Provide solid leadership with financial success

Strategies the company is implementing to achieve these goals include:

- Refocusing and restructuring sales and client support services closer to customers to be more responsive to their needs
- Reengineering its software solutions to open, client/server platforms to provide customers with a range of hardware platforms
- Using model-driven I-CASE tools and object-oriented technology
- Developing business alliances with such vendors as Synon, Oracle, Sybase, HP, IBM, Sequent and Big 6 and other consulting firms

Financials

American Software's fiscal 1995 revenue was $79.5 million, a 16% decrease from fiscal 1994 revenue of $94.2 million. Net losses were $6.7 million in fiscal 1995, compared to net losses of $6.6 million in fiscal 1994. A five-year financial summary is shown on the following page.

- The company's performance in the second half of the year improved substantially compared to the first half. The first six months of the year yielded a loss of $0.26 per share, while the second six months resulted in a net loss of $0.04 per share.
- Factors affecting the improvement in the second half of the year included a 76% increase in software license revenues and a 12% decrease in total expenses.

Revenue declines in fiscal 1995 were caused by decreases in software license fee revenues and service revenues.

- Software license fee revenues decreased 33% during fiscal 1995 to $20.8 million due to economic uncertainties and delays in customer purchase decisions. The company was between product cycles and the full line of client/server products was not yet available.

© INPUT 1996. Reproduction prohibited.

- Service revenue, which consists of consulting and custom programming professional services and outsourcing revenues, decreased 15% to $36.0 million due to a 25% decrease in professional services. This decrease was partially offset by a 54% increase in outsourcing revenue.
- Maintenance revenue increased 5% to $22.6 million. The growth in maintenance has slowed, due primarily to the slower rate at which new customers were added.

American Software, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

	Fiscal Year				
Item	4/95	4/94	4/93	4/92	4/91
Revenue	$79.4	$94.2	$106.8	$113.1	$101.8
• Percent change from previous year	(16%)	(12%)	(6%)	11%	10%
Income (loss) before taxes	$(11.3)	$(11.7)	$6.7	$27.9	$26.7
• Percent change from previous year	3%	(275%)	(76%)	4%	(11%)
Net income (loss)	$(6.7)	$(6.6)	$5.1	$18.6	$17.5
• Percent change from previous year	(2%)	(229%)	(73%)	6%	(10%)
Earnings (loss) per share	$(0.30)	$(0.30)	$0.23	$0.80	$0.75
• Percent change from previous year	--	(230%)	(71%)	7%	(13%)

American Software, Inc.
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	4/95		4/94		4/93	
Product/Service	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Software license fees	$20.8	26%	$31.1	33%	$39.4	37%
Maintenance services	$22.6	28%	21.6	23%	19.9	19%
Professional services	$26.8	34%	35.5	38%	44.0	41%
Systems operations	$9.2	12%	6.0	6%	3.5	3%
Total	$79.4	100%	$94.2	100%	$106.8	100%

© INPUT 1996. Reproduction prohibited.

Software license revenue for mainframe and midrange platforms continues to decline, while revenue from client/server platforms is growing, as estimated in the following exhibit:

	Software License Revenue ($ Millions)	
Hardware Platform	4/95	4/94
Mainframe	$5.2	$16.3
Midrange	7.3	7.7
Client/server	8.3	7.1
Total	$20.8	$31.1

Interim Results

Revenue for the six months ending October 31, 1995 was $42.4 million, a 10% increase over $38.5 million for the same period in 1994. Net income was $777,000, compared to net losses of $5.8 million for the same period a year ago.

- The growth was fueled by new sales to Nestle, Acromed, Springs Window Fashions and Jerome Foods. Other existing customers either upgraded their supply chain management solutions or licensed new software.
- Both midrange and client/server software license fee revenues were higher than the levels of the first quarter and those of the second quarter last year.
- During the first quarter, the attention focused on the reorganization of the sales force and field operations became a significant factor in the sales results falling below previous levels.

Market Financials

American Software markets and supports its Supply Chain Management applications software products to a range of users, including manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel and textiles, as well as retail, wholesale trade, financial institutions, the health services industry, petroleum producers, public utilities and the transportation industry.

Geographic Markets

Approximately 87% of American Software's fiscal 1995 revenue was derived from the U.S. and 13% from international sources.

A three-year summary of geographic sources of revenue appears on the following page.

Acquisitions

In March 1995, American Software acquired 30% of the equity of Txbase Systems, Inc. American Software received marketing rights for the Txbase suite of software products and has the option to increase its equity position to 50% of Txbase.

- Txbase is an Ontario, Canada-based provider of client/server applications software.
- Txbase software products include manufacturing, distribution, and financial modules developed for open systems architecture using principally Sybase relational database technology.

© INPUT 1996. Reproduction prohibited.

American Software, Inc.
Three-Year Geographic Source of Revenue Summary
($ Millions)

	Fiscal Year					
	4/95		4/94		4/93	
Geographic Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
U.S.	$69.2	87%	$77.8	83%	$89.6	84%
International (a)	10.3	13%	16.4	17%	17.2	16%
Total	$79.5	100%	$94.2	100%	$106.8	100%

(a) Primarily from customers in Canada, Europe, Australia and Asia

Employees

As of April 30, 1995, American Software had 606 full-time employees, segmented as follows:

Sales and sales support	105
Marketing	15
Customer support and professional services	188
Product development and technical support	253
Accounting and administration	45
	606

The company currently has approximately 640 employees.

Key Products and Services

American Software's solutions focus on the entire supply chain, from raw material through final consumption.

Software Products

American Software's products are designed to be used either singly or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- Products are available for IBM and compatible mainframes, IBM midrange systems (AS/400) and UNIX platforms.
- The products are written in various standard programming languages used for business applications software, including ANS COBOL, COBOL II, Micro Focus COBOL, UNIX and AIX.
- The company is integrating PCs and workstations or clients into its products.

American Software products are summarized in the exhibit. These applications support the three major business process areas necessary to manage today's supply chain—planning, execution and measurement.

© INPUT 1996. Reproduction prohibited.

Exhibit

American Software Products

Application Area/Product Name	Application Area/Product Name
Supply Chain Planning	**Supply Chain Financial**
- Demand Forecasting	- General Ledger and Budgeting
- Distribution Requirements Planning	- Accounts Receivable
- Inventory Planning	- Accounts Payable
- Inventory Deployment	- Capital Project Accounting
- Vehicle Scheduling and Loading	- Fixed Asset Accounting
Supply Chain Manufacturing	**Applied Technologies**
- Master Scheduling	- Automated Data Collection
- Material Requirements Planning	- Electronic Data Interchange
- Bill of Material	- Interactive Voice Response
- Capacity Planning	- Executive Information System
- Production Order Status	- Decision Support Systems
- Route and Work Center Maintenance	- Image Processing
- CMAT	- Optical Character Recognition
- Shop Floor Control	- Knowledge-Based Systems
- Flow Manufacturing	- Radio Frequency Scanners
Supply Chain Logistics	**Utilities**
- Inventory Control and Accounting	- Continuing Property Records
- Purchasing	**Transportation**
- Customer Order Processing	- Automated Freight Payment
- Warehouse Management	

© INPUT 1996. Reproduction prohibited.

- Planning systems focus on having the right product at the right place at the right time. Demand and Replenishment Planning is central to this function.

- Execution systems facilitate the actual movement of product and information through a supply chain. Customer Order Fulfillment, Procurement, Manufacturing and Transportation Management solutions are tightly integrated and EDI enabled to enhance the supply chain communication process.

- Measurement functions analyze and control financial and operational performance. This process is supported by many of American Software's products, including its Financial Management applications.

In April 1995, American Software announced its next-generation Supply Chain Management product line, which includes broad coverage of planning, logistics, manufacturing and financial business functions in a client/server environment. The product line includes four packaged business models:

- Supply Chain Planning (SCP) for forecasting and DRP

- Supply Chain Logistics (SCL) for Customer Order Management, Inventory and Purchasing

- Supply Chain Manufacturing (SCM) for traditional MRP II applications, plus Flow Manufacturing

- Supply Chain Financials (SCF) for Accounts Payable, Accounts Receivable and General Ledger

Other client/server products available from American Software include the following:

- Supply Chain Planning provides Demand Planning and Replenishment Planning (Distribution Requirements Planning, Deployment and Vendor Managed Inventory) to support supply planning.

- WarehouseP&RO is a warehouse control system that supports Receiving, Product Storage, Warehouse Administration, Workflow Optimization and Picking and Shipping functions. WarehouseP&RO includes in its base architecture ADC-PRO (Automated Data Collection-Parts and Reusable Objects) technology for real-time data collection in an enterprise-wide, open system.

American Software's Supply Chain Management solution includes a variety of application templates for integrating technologies such as radio frequency scanners, interactive voice response, optical character recognition, image processing and EDI. ADC-P&RO is a client/server-based product the integrates data collection applications such as bar coding, automated storage/retrieval systems, automated item pickers, electronic scales, program logic controllers and shop floor devices.

The company also offers the AMSOFT™ family of productivity tools.

Professional Services

American Software's Client Services include application business consulting, technical consulting, education and training, project management and ongoing support services.

The Proven Method, a wholly owned subsidiary, provides contract consulting services to information systems organizations. The company supplies additional resources to augment current staff and provides technical talent for organizations that have minimal experience

© INPUT 1996. Reproduction prohibited.

with new technologies. As companies make the transition from legacy systems, The Proven Method can also provide technical resources to maintain the legacy system while developing new systems.

Outsourcing

American Software provides systems operations services to approximately 20 clients on terms of up to five years. These services are now provided by the company's Amquest, Inc. subsidiary.

Clients

Software license clients include Lone Star Gas, GTE Telephone, The Clorox Corporation, Timex, Fast Food Merchandisers, UPS, Advanced Transformer, Indiana Gas, British Telecom, Sigma Aldrich, Porsche Cars, Jacksonville Electric Authority, Bausch & Lomb, United Design Corporation, Procter & Gamble, Chiquita Brands International, Inc., Martin Marietta, Warner-Lambert Company, Sears Roebuck and Co., Michelin Tire Corporation, American Standard, Nestle, Acromed, Springs Window Fashions Division and Jerome Foods.

Outsourcing clients include Oglethorpe Power Corporation, Borg-Warner Security Corporation and Dixie Yarns.

Marketing and Sales

American Software sells its products directly to users through its sales staff of 105 persons located in six areas worldwide—Mid-America (23), Northeast (18), Southern (31), Western (10), Canada (4), Europe (10) and Asia-Pacific (9).

American Software is continuing a program begun in 1988 to develop a network of sales agents to support sales internationally.

American Software also has joint marketing arrangements with a number of other software and hardware manufacturers, under which each party seeks to market its own products or services in conjunction with products or services of the other party.

Alliances

In July 1995, American Software and Rijnhaave Information Systems formed a joint venture company—Rijnhaave American, Inc.—to provide information systems consulting, network configuration and management, transaction processing, systems support and other data center services. This venture allows both companies to consolidate efforts and expand the scope of their facilities management capabilities.

American Software was selected by Oracle Corporation to be a member of Oracle's Cooperative Applications Initiative program. American Software's Supply Chain Planning solutions are being integrated with Oracle Cooperative Applications.

In May 1995, American Software and systems integrator Syntegra (U.K.) formed a strategic alliance whereby Syntegra will incorporate American Software products as part of an integrated solution to multinational and large national corporations.

American Software also has joint marketing/partner agreements with a number of software and hardware vendors, including Applied Data Research, Cognos, Computer Associates, Hewlett-Packard, IBM, Information Builders, Intermec Corporation, Interactive Images, LX, Seagull Software, Stone & Webster ASDS, Synon, Systecon, Syntellect, Txbase Systems, Telxon, Deloitte & Touche, Price

© INPUT 1996. Reproduction prohibited.

Waterhouse, Ernst & Young, EDS, Sterling Software, Software AG of North America, Sequent Computer Systems and Sybase.

Competitors

Major competitors include D&B Software, Computer Associates, SAP, Manugistics and J.D. Edwards.

Assessment

American Software's strengths include:

- Supply chain management expertise
- Flow manufacturing products
- Introduction of client/server products, including the Logistics Planning Workstation

Challenges for the company over the coming year include:

- Overcoming declining software license revenue
- Successful reengineering of products to open, client/server platforms
- Obtaining ISO-7000 Certification

© INPUT 1996. Reproduction prohibited.

IT2000

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

December 1994

American Software, Inc.

President & CEO: James C. Edenfield
470 East Paces Ferry Road
Atlanta, GA 30305
Phone: (404) 261-4381
Fax: (404) 264-5394

Status:	Public
Employees:	700 (12/94)
Revenue:	$ 94,221,892
Fiscal Year End:	4/30/94

Key Points

- American Software provides enterprise-wide Supply Chain Management™ business applications software and associated support services for a range of IBM and compatible mainframe, midrange and UNIX open client/server systems.
- Supply Chain Management—the business model of the future—allows customer orders, inventory levels, purchase orders and other key information to flow automatically from one business to another, shortening cycle times, reducing inventory, enhancing customer service and loyalty and increasing quality, productivity, profitability and return on investment.
- American Software is committed to re-engineering its integrated solutions to open, client/server platforms. In May 1994, the company released Logistics Planning Workstation—the first product of its UNIX-based, client/server Supply Chain Management applications for business users.
- The company's next generation open, client/server planning system—Supply Chain Planning—will be released in March 1995.
- In order to move its sales and client support services closer to its customers, American Software has increased the size of its field operations and organized into six global

© INPUT 1994. Reproduction prohibited.

- areas—Los Angeles, Chicago, New York, Atlanta, London and Singapore.

- In May 1994, American Software announced a staff reduction of approximately 90 employees, coming primarily from the company's mainframe software application organization. The move reflects the continuing decline in the worldwide mainframe software applications market and the changing emphasis to client/server technology. The company remains committed to fully supporting current and prospective users of American Software's mainframe software products.

Company Description

American Software develops, markets and supports multiplatform enterprise-wide Supply Chain Management applications software products across a wide range of industries.

- The company's product line encompasses integrated business applications in the areas of logistics/planning, order management, manufacturing and financial control.

- The company also provides customer education and training, consulting and custom development professional services and systems operations (outsourcing).

Organization and Structure

American Software is organized into the following divisions/units:

- Midrange Division

- Client/Server Division

- Customer Services

- Outsourcing Services

- Professional Services

- Alliance Programs

- International Operations

- AMEDIA, Inc., based in Atlanta (GA), is a wholly owned subsidiary providing CD ROM technology.

- Distribution Sciences, Inc., based in Des Plaines (IL), is a wholly owned subsidiary providing transportation management software.

The company's world headquarters is in Atlanta (GA). Area headquarters and associated support offices are as follows:

- Northeast U.S.—Headquartered in Tarrytown (NY), with additional offices in Quincy (MA) and Wayne (PA)

- Southern U.S.—Headquartered in Atlanta (GA), with additional offices in Irving (TX) and Raleigh (NC)

- Mid-America U.S.—Headquartered in Rosemont (IL) with additional offices in Cincinnati and Independence (OH), Livonia (MI) and Eden Prairie (MN)

- Western U.S.—Headquartered in Huntington Beach (CA), with additional offices in Bellingham (WA), Denver (CO) and San Francisco (CA)

- Europe—Headquartered in London (England), with an additional office in Paris

- Asia-Pacific—Headquartered in Singapore, with additional offices in Sydney and Melbourne (Australia)

- Canada—Headquartered in Markham (Ontario)

© INPUT 1994. Reproduction prohibited.

American Software also has agents in Toronto, Belgium, Italy, the Netherlands, Singapore, Australia, Indonesia, Japan, Malaysia, the Philippines and Thailand.

Company Strategy

American Software's strategy is to create an integrated line of standard applications software operating on three strategic computer platforms—IBM and compatible mainframes, IBM midrange (AS/400) and UNIX (IBM RS/6000, HP 9000, Sequent and other UNIX platforms).

American Software's goals are to:

- Establish American Software as the world leader in Supply Chain Management solutions
- Capture technology leadership by providing solutions customers want on the platforms they need
- Strengthen its commitment to customer satisfaction around the globe
- Put the right people in the right places
- Create strong global alliances
- Provide solid leadership with financial success

Strategies the company is implementing to achieve these goals include:

- Refocusing and restructuring sales and client support services closer to customers to be more responsive to their needs
- Re-engineering its software solutions to open, client/server platforms to provide customers with a range of hardware platforms
- Using model-driven I-CASE tools and object-oriented technology
- Developing business alliances with such vendors as Synon, Oracle, Sybase, HP, IBM, Sequent and Big 6 and other consulting firms

Financials

American Software's fiscal 1994 revenue was $94.2 million, a 12% decrease from fiscal 1993 revenue of $106.8 million. Net losses were $6.6 million in fiscal 1994, compared to net income of $5.1 million in fiscal 1993.

A five-year financial summary is shown on the following page.

Revenue declines in fiscal 1994 were caused by decreases in software license fee revenues and service revenues.

Software license fee revenues decreased $8.3 million or 21% from fiscal 1993.

- American Software's software licenses have historically been generated on IBM and compatible mainframes and the IBM AS/400 midrange platform. In fiscal 1993, client/server license revenues became a significant contributor to license fee revenues and continued to increase in fiscal 1994.
- Mainframe license fee revenues declined in both fiscal 1994 and 1993 due to the continued decline of the marketplace for mainframe software caused by the technology trend away from mainframe hardware. Mainframe license fee revenues were $16.3 million in fiscal 1994 compared to $20.7 million in fiscal 1993.
- Midrange license fee revenues were down 44% to $7.7 million in fiscal 1994 from $13.8 million in fiscal 1993.

© INPUT 1994. Reproduction prohibited.

American Software, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

Item	Fiscal Year 4/94	4/93	4/92	4/91	4/90
Revenue	$94.2	$106.8	$113.1	$101.8	$92.8
• Percent change from previous year	(12%)	(6%)	11%	10%	26%
Income (loss) before taxes	$(11.7)	$6.7	$27.9	$26.7	$30.1
• Percent change from previous year	(275%)	(76%)	4%	(11%)	21%
Net income (loss)	$(6.6)	$5.1	$18.6	$17.5	$19.5
• Percent change from previous year	(229%)	(73%)	6%	(10%)	20%
Earnings (loss) per share	$(0.30)	$0.23	$0.80	$0.75	$0.86
• Percent change from previous year	(230%)	(71%)	7%	(13%)	19%

- Client/server license fee revenues increased 42% to $7.1 million in fiscal 1994 compared to $5.0 million in fiscal 1993.

Hardware Platform	1994 Software License Revenue ($ Millions)
Mainframe	$16.3
Midrange	7.7
Client/server	7.1
Total	$31.1

Service revenues—which includes consulting, custom programming and outsourcing revenues—decreased 13% to $41.5 million in fiscal 1994 from $47.5 million in fiscal 1993, due to a 19% decline in professional services revenues.

- Unlike outsourcing, the consulting and custom programming business is primarily driven by software license fees generated in the prior six to twelve months. This segment of the business has followed the pattern of the two-year decline in software license fees.

- Outsourcing revenue increased 71% to $6 million during fiscal 1994.

Net losses were due to the decline in revenues as well as the 5% increase in total costs and expenses.

Revenue Analysis by Product/Service

A three-year summary of source of revenue by product/service follows:

© INPUT 1994. Reproduction prohibited.

American Software, Inc.
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	4/94		4/93		4/92	
Product/Service	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Software license fees	$31.1	33%	$39.4	37%	$53.3	47%
Maintenance services	21.6	23%	19.9	19%	16.7	15%
Professional services	35.5	38%	44.0	41%	43.1	38%
Systems operations	6.0	6%	3.5	3%	--	--
Total	$94.2	100%	$106.8	100%	$113.1	100%

Interim Results

Revenue for the six months ending October 31, 1994 was $38.5 million, compared to $47.6 million for the same period in 1993. Net losses were more than $5.8 million, compared to net losses of $1.9 million for the same period a year ago.

- Second quarter fiscal 1995 revenues increased 11% over those of the first quarter of fiscal 1995, but declined 10% from the same quarter one year ago.
- Both midrange and client/server software license fee revenues were higher than the levels of the first quarter and those of the second quarter last year.
- During the first quarter, the attention focused on the reorganization of the sales force and field operations became a significant factor in the sales results falling below previous levels.

Market Financials

American Software markets and supports its Supply Chain Management applications software products to a range of users, including manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel and textiles, as well as retail, wholesale trade, financial institutions, the health services industry, petroleum producers, public utilities and the transportation industry.

Geographic Markets

Approximately 83% of American Software's fiscal 1994 revenue was derived from the U.S. and 17% from international sources.

A three-year summary of geographic sources of revenue follows:

© INPUT 1994. Reproduction prohibited.

American Software, Inc.
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	4/94		4/93		4/92	
Geographic Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
U.S.	$77.8	83%	$89.6	84%	$88.0	84%
International (a)	16.4	17%	17.2	16%	25.1	16%
Total	$94.2	100%	$106.8	100%	$113.1	100%

(a) Primarily from customers in Canada, Europe, Australia and Asia

Employees

As of April 30, 1994, American Software had 853 full-time employees, segmented as follows:

Marketing, sales and sales support	176
Customer support and professional services	206
Product development and technical support	411
Accounting and administration	60
	853

In May 1994, the number of employees was reduced by approximately 90, coming primarily from the company's mainframe software application organization.

The company currently has approximately 700 employees.

Key Products and Services

American Software's solutions focus on the entire supply chain, from raw material through final consumption.

Software Products

American Software's products are designed to be used either singly or in combination to assist customers in forecasting and inventory management, in purchasing and materials control and in order processing and receivables control.

- Products are available for IBM and compatible mainframes, IBM midrange systems (AS/400) and UNIX platforms.
- The products are written in various standard programming languages used for business application software, including ANS COBOL, COBOL II, Micro Focus COBOL, UNIX and AX.
- The company is integrating PCs and workstations or clients in its products.

American Software products are summarized in the exhibit. These applications support the three major business process areas necessary to manage today's supply chain—planning, execution and measurement.

© INPUT 1994. Reproduction prohibited.

Exhibit

American Software Products

Application Area/Product Name	Application Area/Product Name
Demand and Replenishment Planning	**Order Fulfillment**
- Demand Forecasting	- Customer Order Processing
- Distribution Requirements Planning	- Inventory Control
- Manufacturing Planning	- Warehouse Management
Manufacturing	**Transportation**
- Master Production Scheduling	- Automated Freight Payment
- Material Requirements Planning	**Financial Management**
- Capacity Planning	- General Ledger and Budgeting
- Shop Floor Control	- Accounts Receivable
- Assemble-To-Order	- Accounts Payable
- Product Configurator	- Capital Project Accounting
- Product Costing	- Fixed Asset Accounting
- Manufacturing Accounting	**Applied Technologies**
- Flow Manufacturing	- Automated Data Collection
Procurement	- Electronic Data Interchange
- Requisitioning	- Interactive Voice Response
- Bid (Request for Quotation)	- Executive Information System
- Purchase Order Management	- Decision Support Systems
- Supplier Management	- Image Processing
- Invoice/Purchase Order Matching	- Optical Character Recognition
- Inventory Control	- Knowledge-Based Systems
- Warehouse Management	- Radio Frequency Scanners

© INPUT 1994. Reproduction prohibited.

- Planning systems focus on having the right product at the right place at the right time. Demand and Replenishment Planning is central to this function.

- Execution systems facilitate the actual movement of product and information through a supply chain. Customer Order Fulfillment, Procurement, Manufacturing and Transportation Management solutions are tightly integrated and EDI enabled to enhance the supply chain communication process.

- Measurement functions analyze and control financial and operational performance. This process is supported by many of American Software's products, including its Financial Management applications.

American Software's client/server applications support OS/2, Windows NT, UNIX and NetWare operating systems; HP Sequent, RS/6000, 486/Pentium and Sun servers; and Windows, OS/2, DOS and UNIX client operating systems. Client/server products available from American Software include the following:

- Logistics Planning Workstation combines Demand Forecasting, Distribution Requirements Planning, Vendor Managed Inventory and Simulations to support the critical processes of logistics planning.

- Supply Chain Planning provides Demand Planning and Replenishment Planning (Distribution Requirements Planning, Deployment and Vendor Managed Inventory) to support supply planning.

- WarehousePRO is a warehouse control system that supports Receiving, Product Storage, Warehouse Administration, Workflow Optimization and Picking and Shipping functions. WarehousePRO includes in its base architecture ADC-PRO (Automated Data Collection-Parts and Reusable Objects) technology for real-time data collection in an enterprise-wide, open system.

American Software's Supply Chain Management solution includes a variety of application templates for integrating technologies such as radio frequency scanners, interactive voice response, optical character recognition, image processing and EDI.

The company also offers the AMSOFT™ family of productivity tools.

Professional Services

American Software's Client Services include application business consulting, technical consulting, education and training, project management and ongoing support services.

Outsourcing

American Software provides systems operations services to approximately 20 clients on terms of up to five years.

Clients

In January 1993, GTE Telephone Operations entered into a strategic Enterprise License Agreement to license American Software's Supply Chain Management systems to be used in GTE's domestic and international operations. For a period of seven years, GTE has access to all of American Software's current and to be developed software products on client/server, AS/400 and mainframe computing platforms. The agreement could be valued as much as $15 million in software and services over three years.

© INPUT 1994. Reproduction prohibited.

Other software license clients include Procter & Gamble, Chiquita Brands International, Inc., Martin Marietta, Warner-Lambert Company, Sears Roebuck and Co., Michelin Tire Corporation and American Standard.

Outsourcing clients include Oglethorpe Power Corporation, Borg-Warner Security Corporation and Dixie Yarns.

Marketing and Sales

American Software sells its products directly to users through its sales staff of 85 persons located in six areas worldwide—Mid-America (23), Northeast (17), Southern (17), Western (11), European (11) and Asia-Pacific (6).

American Software is continuing a program begun in 1988 to develop a network of sales agents to support sales internationally.

American Software also has joint marketing arrangements with a number of other software and hardware manufacturers, under which each party seeks to market its own products or services in conjunction with products or services of the other party.

Alliances

American Software has selected Synon Corporation's model-based development system as its strategic Application Development Environment. American Software will use Synon's full product line and professional services in its re-engineering products to develop and deploy its manufacturing, financial and distribution application sets to a client/server environment on AS/400s and UNIX platforms.

American Software also has alliances/agreements with Computer Associates, Information Builders (Sterling Software), Intermec Corporation, Interactive Images, Syntellect, Deloitte & Touche, Price Waterhouse, Ernst & Young, IBM, EDS, Software AG of North America, Oracle, HP, Sequent Computer Systems and Sybase.

Competitors

Major competitors include D&B Software, Computer Associates, SAP, Manugistics and J.D. Edwards.

Assessment

American Software's strengths include:

- Supply chain management expertise
- Flow manufacturing products
- Introduction of client/server products, including the Logistics Planning Workstation

Challenges for the company over the coming year include:

- Overcoming declining software license revenue
- Successful re-egineering of products to open, client/server platforms
- Obtaining ISO-7000 Certification

© INPUT 1994. Reproduction prohibited.

American Software

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
Phone: (404) 261-4381
Fax: (404) 264-5394

Chairman:	Thomas L. Newberry
President & CEO:	James C. Edenfield
Status:	Public Corporation
Total Employees:	950
Total Revenue	$113,125,000
Fiscal Year End:	4/30/92

Key Points

- American Software offers integrated MRP and financial management systems and professional services.
- In 1992, American Software acquired Distribution Sciences, Inc. This acquisition enhances American Software's logistics solutions with transportation related applications.
- In 1992, American Software's AS/400 product developments have paid off with revenues for that product line increasing by 50%.
- American Software is well positioned in the manufacturing client/server market having released two client/server products in 1991.
- American Software faces a significant challenge in 1993 with the increasing use of the UNIX operating system in the manufacturing market.

Copyright 1993 by INPUT. Reproduction Prohibited.

Company Description

American Software, Inc., founded in 1970, develops, markets and supports business applications software products for mainframes and midrange computers to clients in a range of industries including manufacturing, distribution, utilities, banking and finance, health care, education, government, and transportation. The company's product line offers integrated materials management and financial control systems, including order management, forecasting, distribution and inventory management, purchasing and materials control, manufacturing resource planning, and financial applications. American Software also provides a range of professional services through its Professional Services Division.

Organization/ Structure

American Software has regional offices in Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Hartford, Los Angeles, Minneapolis, New York, Philadelphia, Pittsburgh, San Francisco, Seattle, Singapore, and Toronto.

International subsidiaries are in Australia, Japan, Paris, Thailand, and the United Kingdom.

American Software also has international agents in Belgium, Germany, Hong Kong, Indonesia, Italy, Korea, Malaysia, the Philipines, Singapore, Taiwan, and Thailand.

Company Strategy

The company's strategy is to create an integrated line of standard applications software products for mainframe and midrange platforms. American Software's products are designed to be used either singly or in combination to meet unique customer requirements.

To help further increase its market share in certain vertical markets (manufacturing, distribution, utilities, health care, and banking), American Software has expanded its basic software to support specific industry functions.

Financials

Fiscal 1992 revenue reached $113 million, an 11% increase over fiscal 1991 revenue of $101.8 million. Net income was $18.5 million in fiscal 1992, compared to $ 17.4 million in fiscal 1991. In the five-year summary that follows, results prior to fiscal 1992 have been restated to reflect a change in the method of recognizing software revenue:

Copyright 1993 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR				
ITEM	4/92	4/91	4/90	4/89	4/88
Revenue	$113	$101.8	$92.8	$73.5	$52.4
· Percent increase from previous year	11%	10%	26%	40%	
Income before taxes	$27.8	$26.7	$30.1	$24.8	$15.0
· Percent increase(decrease) from previous year	4%	(11%)	21%	65%	24%
· Gross margin	25%	26%	32%	34%	29%
Net income	$18.5	$17.5	$19.5	$16.3	$9.31
· Percent increase (decrease) from previous year	6%	(10%)	20%	75%	31%
· Net margin	16%	17%	21%	22%	18%
Earnings per share	$0.80	$0.75	$0.86	$0.72	$0.40
· Percent increase (decrease) from previous year	7%	(13%)	19%	80%	29%

Acquisitions/ Divestitures

In June 1992, American Software announced the acquistion of the net assets of Distribution Sciences, Inc. (DSI) located in Des Plaines (IL). DSI provides integrated transportation management application software and services addressing freight rating, shipment planning and consolidation, and freight bill audit and payment functions.

The acquisition strengthens American Software's position in logistics and distribution planning. When DSI's product line is marketed with American Software's Order Management, Procurement, Distribution and Financial applications, all aspects of logistics planning will be addressed, including both inbound and outbound freight management.

Alliances

American Software also has joint marketing relationships with other software and hardware vendors including Computer Associates, IBM, Intermec, Interactive Images, AHP Software, Deloitte & Touche, Electronic Data Systems, Ernst & Young, Hewlett Packard, Metro Mark Integrated Systems (Sterling Software), Price Waterhouse, Sequent, Software AG, Syntellect, and IBM as a Business Partner in the Industry Applications Specialist Program.

Copyright 1993 by INPUT. Reproduction Prohibited.

Employees

As of April 30, 1993, American Software had 950 full-time employees (with revenue per employee at $126,684), segmented as follows:

Competition

Major competitors include D & B Software, Computer Associates, and IBM.

Key Products and Services

Approximately 47% of American Software's fiscal 1992 revenue was derived from applications software product license fees; 15% was derived from software maintenance; and 38% was derived from education and training, consulting and programming professional services.

A three-year summary of source of revenue follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/92		4/91		4/90	
ITEM	REVENUE	PERCENT OF TOTAL	REVENUE	PERCENT OF TOTAL	REVENUE	PERCENT OF TOTAL
Purchasing, Materials Control, and Financial software	$42.8	38%	$36.8	37%	$34.5	39%
Forecasting and Inventory Management software	$10.5	9%	$10.2	9%	$9.1	8%
Maintenance	$16.7	15%	$13.7	14%	$11.6	12%
Professional services	$43.1	38%	$41.2	40%	$37.6	41%
TOTAL	**113.1**	**100%**	**$101.9**	**100%**	**$92.8**	**100%**

American Software provides an integrated line of cross-industry and industry-specific applications software products that can be used either individually or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- The products are written in ANS COBOL and are available for batch and on-line environments.

Copyright 1993 by INPUT. Reproduction Prohibited.

American Software's products are summarized in Exhibit A and include the following:

- Forecasting and Inventory Management software consists of five software modules designed to provide the user with accurate sales forecasts in order to minimize investment in inventory and to distribute inventory more effectively.

- Purchasing and Materials Control software consists of 24 modules that provide information concerning the status of purchasing activities and financial and manufacturing operations. Several modules (cross-industry modules) support the general financial and operational functions of most businesses. Manufacturing modules assist the user in planning and controlling work flow in a manufacturing operation.

While American Software's products can be used individually, they are frequently used in combination as an integrated system. The company's integrated systems, summarized in Exhibit B, are each tailored to a specific business orientation and include the following:

- Manufacturing Resource Planning (MRP-8), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions and provides for accurate shipment dates.

- Distribution Resource Planning (DRP-8), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is an extension of MRP-8 for industries involved in distribution. DRP-8 converts sales forecasts at each shipment location into requirements that are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements.

- FINANCIAL-8, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is a financial control system that can be integrated with MRP-8 and DRP-8.

- UTILITIES-8, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to the public utilities industry.

- HEALTHCARE-8, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to health care facilities for materials management and financial control.

Copyright 1993 by INPUT. Reproduction Prohibited.

EXHIBIT A

AMERICAN SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED
Forecasting and Inventory Management Software		
Demand Forecasting	1971	350
Distribution Requirements Planning	1976	220
Inventory Planning	1973	200
Inventory Deployment	1976	100
Vehicle Scheduling and Loading	1979	25
Purchasing and Materials Control Software		
Cross Industry Modules:		
Inventory Control and Accounting	1978	380
Purchasing	1978	330
Material Request	1978	230
Item Information Management System	1980	187
Bid (Request for Quotation)	1984	85
Accounts Payable	1979	160
Fixed Asset Accounting	1975	78
Lease Accounting	1977	12
Capital Project Accounting	1976	65
Accounts Receivable	1984	100
Employee Expense	1984	25
General Ledger	1979	35
Customer Order Processing	1979	180
Maintenance Management System	1991	15
Warehouse Management System	1991	1
Manufacturing Modules:		
Master Scheduling	1972	82
Material Requirements Planning	1974	100
Bill of Material	1975	175
Capacity Planning	1972	50
Production Order Status	1978	100
Route and Work Center Maintenance	1979	47
Shop Floor Control	1984	48
Cost Management and Tracking (CMAT)	1986	32
Utility Industry Module:		
Continuing Property Records	1985	17

Copyright 1993 by INPUT. Reproduction Prohibited.

EXHIBIT B

AMERICAN SOFTWARE INTEGRATED SOFTWARE SYSTEMS

SYSTEM/MODULES	SYSTEM/MODULES
MRP-8 - Demand Forecasting - Master Scheduling - Material Requirements Planning - Bill of Material - Capacity Planning - Production Order Status - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable DRP-8 - Demand Forecasting - Inventory Planning - Distribution Requirements Planning - Inventory Deployment - Vehicle Scheduling and Loading - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request UTILITIES-8 - Inventory Management - Work Orders - Procurement - Financial/Accounting	HEALTHCARE-8 - Accounts Payable - Demand Forecasting - Distribution Inventory Management - Inventory Control and Accounting - Inventory Planning - Procurement Matching - Purchasing - Requisition Management FINANCIAL-8 - Accounts Payable - Purchasing - Capital Project Accounting - Customer Order Processing - Accounts Receivable - Inventory Control and Accounting - Fixed Asset Accounting - General Ledger

Copyright 1993 by INPUT. Reproduction Prohibited.

American Software's AMSOFT™ family of end-user productivity tools include the following:

- AMSOFT QueryWriter™ is an adapted version of Software AG's SUPERNATURAL on-line inquiry and report writer facility.
- AMSOFT DeskTop™ is a graphical user interface (GUI) to enterprise application products.
- AMSOFT Report-pc™ is an optional feature for the Master Scheduling system for PC users.
- AMSOFT QOE-pc™ is an order management tool designed to permit order entry on a PC with transmission to a mainframe via electronic data interchange.
- AMSOFT Buyer Workstation-pc™ allows purchasing system users to source, expedite, and review receipts for immediate problem resolution.
- AMSOFT ScreenDesigner® is a tool for personalized screen modification.
- AMSOFT UserHelp™ provides real-time information about each field on any American Software application screen.
- AMSOFT Sales-pc™ allows users to review selected information on a specific customer, product, product class, time period, or geographic area.
- AMSOFT Leitstand™ automates the customer's production control center and incorporates the latest techniques in finite scheduling and productions. The product interfaces with the MRP-8 system.
- AMSOFT PayLoad™ supports traffic managers in preparing economical load manifests of customer shipments and warehouse replenishments. Simulation tools allow loads to be modified as events occur.

ENSOFT™ client/server products include:

- ENSOFT™ WMS, American Software's Warehouse Management System, is a state-of-the-art solution that supports advanced warehousing techniques while operating in a client/server environment.
- ENSOFT™ MPW, American Software's Materials Planning Workstation, works in a client/server mode while allowing real-time

Copyright 1993 by INPUT. Reproduction Prohibited.

access to examine materials consumption from purchased subassembly to finished goods.

- ENSOFT™ LPW, American Software's Logistics Planning Workstation, is a complete inventory planning tool that allows the user to analyze historical demand, review several methods of forecasting, select the most accurate, then calculate a forecast.

Support services provided by American Software in conjunction with its software products include a 24-hour hotline service, on-site implementation assistance, training courses, and documentation materials.

Through its Professional Services Division, American Software provides specialized consulting, custom programming, on-site installation, and extended training services. These services are provided outside of the services included in the licensing of the company's software products and are typically provided under a separate contract based on time and materials used.

Industry Markets

American Software customers typically are medium and large companies or divisions of larger companies. The company has licensed its applications software to approximately 1,050 customers.

End users include manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel, and textiles; financial institutions; the health care industry; petroleum producers; public utilities; and the transportation industry.

Geographic Markets

Approximately 78% of American Software's fiscal 1992 revenue was derived from the U.S. and 22% was derived from international sales.

A three-year source of revenue summary follows:

Copyright 1993 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
THREE-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/92		4/91		4/90	
ITEM	REVENUE	PERCENT OF TOTAL	REVENUE	PERCENT OF TOTAL	REVENUE	PERCENT OF TOTAL
U.S.	$88.0	78%	$91.9	90%	$76.8	83%
International	$25.1	22%	10.0	10%	16.0	17%
TOTAL	**$113.1**	**100%**	**$101.9**	**100%**	**$92.8**	**100%**

Computer Hardware and Software

American Software has the following computers installed at its headquarters in support of software development and testing:

- 1 IBM 3084Q, OS, MVS
- 2 IBM System/38s
- 1 IBM 9370
- 2 IBM AS/400s
- 1 Sequent 250
- 2 HP 9000s
- 1 RS/6000

Copyright 1993 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President and CEO
Public Corporation, NASDAQ
Total Employees: 804 (4/91)
Total Revenue, Fiscal Year End
4/30/91: $101,853,974

The Company

American Software, Inc., founded in 1970, develops, markets, and supports business applications software products for IBM mainframes, minicomputers, and microcomputers to clients in a range of industries, including manufacturing, distribution, utilities, banking and finance, health care, education, government, and transportation. The company's product line offers integrated materials management and financial control systems, including order management, forecasting, distribution and inventory management, purchasing and materials control, manufacturing resource planning, and financial applications. American Software also provides a range of professional services through its Professional Services Division.

The company's strategy has been to create an integrated line of standard applications software products for IBM ES/370 and AS/400 platforms. The products are designed to be used either singly or in combination to meet unique customer requirements. To help further increase its market share in certain vertical markets (manufacturing, distribution, utilities, health care, and banking), American Software has expanded its basic software to support specific industry functions.

Fiscal 1991 revenue reached $101.9 million, a 10% increase over fiscal 1990 revenue of $92.8 million. Net income was $17.5 million in fiscal 1991, compared to $19.5 million in fiscal 1990. In the five-year summary that follows, results prior to fiscal 1991 have been restated to reflect a change in the method of recognizing software revenue:

Copyright 1992 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR					
ITEM	4/91	4/90	4/89	4/88	4/87	CAGR
Revenue	$101.9	$92.8	$73.5	$52.4	$43.2	24%
· Percent increase from previous year	10%	26%	40%	21%	N/A	
Income before taxes	$26.7	$30.1	$24.8	$15.0	$12.1	22%
· Percent increase (decrease) from previous year	(11%)	21%	65%	24%	N/A	
· Gross margin	26%	32%	34%	29%	28%	
Net income	$17.5	$19.5	$16.3	$9.3	$7.1	25%
· Percent increase (decrease) from previous year	(10%)	20%	75%	31%	N/A	
· Net margin	17%	21%	22%	18%	16%	
Earnings per share	$0.75	$0.86	$0.72	$0.40	$0.32	24%
· Percent increase (decrease) from previous year	(13%)	19%	80%	29%	N/A	

Revenue for the six months ending October 31, 1991 reached $54.0 million, a 9% increase over $49.4 million for the same period in 1990. Net income was over $8.7 million, about the same as last year.

As of April 30, 1991, American Software had 804 full-time employees (with revenue per employee at $126,684), segmented as follows:

Marketing and sales	155
Customer support/professional services	195
Product development and technical support	388
Accounting and administration	66
	804

Major competitors include D & B Software, Computer Associates, and IBM.

Copyright 1992 by INPUT. Reproduction Prohibited.

Key Products and Services

Approximately 46% of American Software's fiscal 1991 revenue was derived from applications software product license fees; 14% was derived from software maintenance; and 40% was derived from education and training, consulting, and programming professional services.

A three-year summary of source of revenue follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/91		4/90		4/89	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Purchasing, Materials Control, and Financial software	$36.8	37%	$34.5	39%	$30.8	41%
Forecasting and Inventory Management software	10.2	9%	9.1	8%	8.5	12%
Maintenance	13.7	14%	11.6	12%	9.3	13%
Professional services	41.2	40%	37.6	41%	24.9	34%
TOTAL	**$101.9**	**100%**	**$92.8**	**100%**	**$73.5**	**100%**

American Software provides an integrated line of cross-industry and industry-specific applications software products that can be used either individually or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- The products are written in ANS COBOL and are available for batch and on-line environments.

American Software's products are summarized in Exhibit A and include the following:

- Forecasting and Inventory Management software consists of five software modules designed to provide the user with accurate sales forecasts in order to minimize investment in inventory and to distribute inventory more effectively.

- Purchasing and Materials Control software consists of 24 modules that provide information concerning the status of

 Copyright 1992 by INPUT. Reproduction Prohibited.

purchasing activities, and financial and manufacturing operations. Several modules (cross-industry modules) support the general financial and operational functions of most businesses. Manufacturing modules assist the user in planning and controlling work flow in a manufacturing operation.

While American Software's products can be used individually, they are frequently used in combination as an integrated system. The company's integrated systems, summarized in Exhibit B, are each tailored to a specific business orientation and include the following:

- Manufacturing Resource Planning (MRP-8®), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions, and provides for accurate shipment dates.

- Distribution Resource Planning (DRP-8®), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is an extension of MRP-8 for industries involved in distribution. DRP-8 converts sales forecasts at each shipment location into requirements that are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements.

- FINANCIAL-8®, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is a financial control system that can be integrated with MRP-8 and DRP-8.

- UTILITIES-8®, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to the public utilities industry.

- HEALTHCARE-8™, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to health care facilities for materials management and financial control.

- MRP/38®, for IBM System/38 and AS/400 computers, is marketed to manufacturers.

- DRP/38®, for IBM System/38 and AS/400 computers, is marketed to the distribution industry.

Copyright 1992 by INPUT. Reproduction Prohibited.

EXHIBIT A

AMERICAN SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED
Forecasting and Inventory Management Software		
Demand Forecasting	1971	350
Distribution Requirements Planning	1976	220
Inventory Planning	1973	200
Inventory Deployment	1976	100
Vehicle Scheduling and Loading	1979	25
Purchasing and Materials Control Software		
Cross Industry Modules:		
Inventory Control and Accounting	1978	380
Purchasing	1978	330
Material Request	1978	230
Item Information Management System	1980	187
Bid (Request for Quotation)	1984	85
Accounts Payable	1979	160
Fixed Asset Accounting	1975	78
Lease Accounting	1977	12
Capital Project Accounting	1976	65
Accounts Receivable	1984	100
Employee Expense	1984	25
General Ledger	1979	35
Customer Order Processing	1979	180
Maintenance Management System	1991	15
Warehouse Management System	1991	1
Manufacturing Modules:		
Master Scheduling	1972	82
Material Requirements Planning	1974	100
Bill of Material	1975	175
Capacity Planning	1972	50
Production Order Status	1978	100
Route and Work Center Maintenance	1979	47
Shop Floor Control	1984	48
Cost Management and Tracking (CMAT)	1986	32
Utility Industry Module:		
Continuing Property Records	1985	17

Copyright 1992 by INPUT. Reproduction Prohibited.

EXHIBIT B

AMERICAN SOFTWARE INTEGRATED SOFTWARE SYSTEMS

SYSTEM/MODULES	SYSTEM/MODULES
MRP-8 - Demand Forecasting - Master Scheduling - Material Requirements Planning - Bill of Material - Capacity Planning - Production Order Status - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request DRP-8 - Demand Forecasting - Inventory Planning - Distribution Requirements Planning - Inventory Deployment - Vehicle Scheduling and Loading - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request FINANCIAL-8 - Accounts Payable - Purchasing - Capital Project Accounting - Customer Order Processing - Accounts Receivable - Inventory Control and Accounting - Fixed Asset Accounting - General Ledger UTILITIES-8 - Inventory Management - Work Orders - Procurement - Financial/Accounting	HEALTHCARE-8 - Accounts Payable - Demand Forecasting - Distribution Inventory Management - Inventory Control and Accounting - Inventory Planning - Procurement Matching - Purchasing - Requisition Management MRP/38 - Demand Forecasting - Inventory Planning - Customer Order Entry - Master Scheduling - Material Requirements Planning - Capacity Planning - Bill of Material - Route Work Center Maintenance - Product Costing - Production Order Status - Plant Inventory - Shop Floor Control - Procurement - Financial Control DRP/38 - Demand Forecasting - Inventory Planning - Inventory Deployment - Distribution Requirements Planning - Customer Order Processing - Inventory Status and Control - Procurement - Financial Control

Copyright 1992 by INPUT. Reproduction Prohibited.

American Software's AMSOFT[R] family of end-user productivity tools include the following:

- AMSOFT QueryWriter™ is an adapted version of Software AG's SUPERNATURAL on-line inquiry and report writer facility.
- AMSOFT DRP-pc™ is an optional feature for the company's mainframe Distribution Requirements Planning system that extends planning and simulation capabilities to the PC user.
- AMSOFT Forecast-pc™ is an optional feature for the company's mainframe Demand Forecasting system that extends planning and simulation capabilities to the PC user.
- AMSOFT MPS-pc™ is an optional feature for the Master Scheduling system for PC users.
- AMSOFT QOE-pc™ is an order management tool designed to permit order entry on a PC with transmission to a mainframe via electronic data interchange.
- AMSOFT Buyer Workstation-pc™ allows Purchasing system users to source, expedite, and review receipts for immediate problem resolution.
- AMSOFT IP-pc™ allows Inventory Planning system users to use a PC to access data for simulations.
- AMSOFT Forecast ESP-pc™ provides expert system capabilities on a PC for planners.
- AMSOFT ScreenDesigner™ is a tool for personalized screen modification.
- AMSOFT UserHelp™ provides real-time information about each field on any American Software application screen.
- AMSOFT Sales-pc™ allows users to review selected information on a specific customer, product, product class, time period, or geographic area.
- AMSOFT Promo-pc™ provides marketing or forecasting planners an intelligent workstation where they can create future promotions, monitor promotions in progress, and evaluate the effectiveness of past promotions.

Copyright 1992 by INPUT. Reproduction Prohibited.

- AMSOFT Configurator™ is a specification driven, order entry, planning and manufacturing system that can be used in any manufacture-to-order industry. The product is integrated with MRPII and interfaces with American Software's Forecasting, Customer Order Entry, Manufacturing and Materials Planning, Scheduling, and Shop Floor Control systems.

- AMSOFT Leitstand™ automates the customer's production control center and incorporates the latest techniques in finite scheduling and productions. The product interfaces with the MRP-8 system.

- AMSOFT Integrated Planning Workstation™ is a planning tool that permits workstation access to host-based business information.

- AMSOFT PayLoad™ provides supports traffic managers in preparing economical load manifests of customer shipments and warehouse replenishments. Simulation tools allow loads to be modified as events occur.

Support services provided by American Software in conjunction with its software products include a 24-hour hotline service, on-site implementation assistance, training courses, and documentation materials.

Through its Professional Services Division, American Software provides specialized consulting, custom programming, on-site installation, and extended training services. These services are provided outside of the services included in the licensing of the company's software products and are typically provided under a separate contract based on time and materials used.

Industry Markets

American Software customers typically are medium and large companies or divisions of larger companies. The company has licensed its applications software to approximately 1,050 customers.

End users include manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel, and textiles; financial institutions; the health care industry; petroleum producers; public utilities; and the transportation industry.

American Software also has joint marketing relationships with other software and hardware vendors including Computer Associates, Metro Mark Integrated Systems (Sterling Software), Intermec, Interactive Images, Syntellect, AHP Software, Deloitte & Touche,

Copyright 1992 by INPUT. Reproduction Prohibited.

Ernst & Young, Electronic Data Systems, Price Waterhouse, Software AG, IBM, and IBM as a Business Partner in the Industry Applications Specialist Program.

Geographic Markets

Approximately 90% of American Software's fiscal 1991 revenue was derived from the U.S. and 10% was derived from international sales.

A three-year source of revenue summary follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/91		4/90		4/89	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
U.S.	$91.9	90%	$76.8	83%	$65.0	88%
International	10.0	10%	16.0	17%	8.5	12%
TOTAL	**$101.9**	**100%**	**$92.8**	**100%**	**$73.5**	**100%**

American Software has regional offices in Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Hartford, Los Angeles, Minneapolis, New York Philadelphia, Pittsburgh, San Francisco, Seattle, Singapore, and Toronto.

International subsidiaries are in Australia, Japan, Thailand, and the U.K.

American Software also has international agents in Belgium, France, Germany, Hong Kong, Indonesia, Italy, Korea, Singapore, Taiwan, and Thailand.

Computer Hardware and Software

American Software has the following computers installed at its headquarters in support of software development and testing:

- 1 IBM 3084Q, OS, MVS
- 2 IBM System/38s
- 1 IBM 9370
- 2 IBM AS/400s

Copyright 1992 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President and CEO
Public Corporation, NASDAQ
Total Employees: 748 (4/90)
Total Revenue, Fiscal Year End 4/30/90: $91,118,645

The Company

American Software, Inc., founded in 1970, develops, markets, and supports business application software products for IBM mainframes, minicomputers, and microcomputers to clients in a range of industries, including manufacturing, distribution, utilities, banking and finance, health care, education, government, and transportation. The company's product line offers integrated materials management and financial control systems, including order management, forecasting, distribution and inventory management, purchasing and materials control, manufacturing resource planning, and financial applications. American Software also provides a range of professional services through its Professional Services Division.

The company's strategy has been to create an integrated line of standard application software products for IBM ES/370, ES/390, and AS/400 platforms. The products are designed to be used either singly or in combination to meet unique customer requirements. To help further increase its market share in certain vertical markets (manufacturing, distribution, utilities, health care, and banking), American Software has expanded its basic software to support specific industry functions.

Fiscal 1990 revenue reached $91.1 million, a 27% increase over fiscal 1989 revenue of $71.6 million. Net income increased 22%, from $15.2 million in fiscal 1989 to over $18.5 million in fiscal 1990. A five-year financial summary follows:

Copyright 1990 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

	FISCAL YEAR					
ITEM	4/90	4/89	4/88	4/87	4/86	CAGR
Revenue	$91,119	$71,623	$54,187	$46,727	$38,289	24%
• Percent increase from previous year	27%	32%	16%	22%	29%	
Income before taxes	$28,474	$22,986	$16,665	$15,497	$10,057	30%
• Percent increase from previous year	24%	38%	8%	54%	4%	
• Gross margin	31%	32%	31%	33%	26%	
Net income	$18,556	$15,193 (a)	$10,335	$8,805	$5,915	33%
• Percent increase from previous year	22%	47%	17%	49%	8%	
• Net margin	20%	21%	19%	19%	15%	
Earnings per share (b)	$0.82	$0.67	$0.44	$0.38	$0.26	33%
• Percent increase from previous year	22%	52%	16%	46%	4%	

(a) Includes $713,000 from the cumulative effect of a change in accounting for income taxes.

(b) Restated to reflect a 3-for-2 stock split on June 27, 1990.

Revenue for the three months ending July 31, 1990 reached $22.3 million, an 11% increase over $20.1 million for the same period in 1989. Net income was $3.9 million, the same as was reported for the same period a year ago.

As of April 30, 1990, American Software had 748 full-time employees (with revenue per employee at $121,819), segmented as follows:

Marketing and sales	133
Customer support/professional services	183
Product development and technical support	361
Accounting and administration	71
	748

Major competitors include D & B Software, Computer Associates, and IBM.

Copyright 1990 by INPUT. Reproduction Prohibited.

Key Products and Services

Approximately 46% of American Software's fiscal 1990 revenue was derived from application software product license fees; 13% was derived from software maintenance; 37% was derived from education and training, consulting, and programming professional services; and 4% was derived from other sources.

A three-year summary of source of revenue follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ thousands)

	FISCAL YEAR					
	4/90		4/89		4/88	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Forecasting and Inventory Management software	$7,432	8%	$7,808	11%	$6,931	13%
Purchasing, Materials Control, and Financial software	34,658	38%	29,602	41%	24,938	46%
Maintenance	11,607	13%	9,270	13%	7,220	13%
Professional services	33,787	37%	20,421	29%	11,784	22%
Other	3,635	4%	4,522	6%	3,314	6%
TOTAL	**$91,119**	**100%**	**$71,623**	**100%**	**$54,187**	**100%**

American Software provides an integrated line of cross-industry and industry-specific application software products that can be used either individually or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- The products are written in ANS COBOL and are available for batch and on-line environments.

American Software's products are summarized in Exhibit A and include the following:

- Forecasting and Inventory Management software consists of five software modules designed to provide the user with accurate sales forecasts in order to minimize investment in inventory and to distribute inventory more effectively.

Copyright 1990 by INPUT. Reproduction Prohibited.

- Purchasing and Materials Control software consists of 22 modules that provide information concerning the status of purchasing activities, and financial and manufacturing operations. Several modules (cross-industry modules) support the general financial and operational functions of most businesses. Manufacturing modules assist the user in planning and controlling work flow in a manufacturing operation.

While American Software's products can be used individually, they are frequently used in combination as an integrated system. The company's integrated systems, summarized in Exhibit B, are each tailored to a specific business orientation and include the following:

- Manufacturing Resource Planning (MRP-8®), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions, and provides for accurate shipment dates.

- Distribution Resource Planning (DRP-8®), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is an extension of MRP-8 for the distribution industry. DRP-8 converts sales forecasts at each shipment location into requirements that are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements.

- FINANCIAL-8®, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is a financial control system that can be integrated with MRP-8 and DRP-8.

- UTILITIES-8®, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to the public utilities industry.

- HEALTHCARE-8™, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to health care facilities for materials management and financial control.

- MRP/38®, for IBM System/38 and AS/400 computers, is marketed to manufacturers.

- DRP/38®, for IBM System/38 and AS/400 computers, is marketed to the distribution industry.

Copyright 1990 by INPUT. Reproduction Prohibited.

EXHIBIT A

AMERICAN SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED
Forecasting and Inventory Management Software		
Demand Forecasting	1971	350
Distribution Requirements Planning	1976	220
Inventory Planning	1973	200
Inventory Deployment	1976	100
Vehicle Scheduling and Loading	1979	25
Purchasing and Materials Control Software		
Cross Industry Modules:		
Inventory Control and Accounting	1978	380
Purchasing	1978	330
Material Request	1978	230
Item Information Management System	1980	187
Bid (Request for Quotation)	1984	85
Accounts Payable	1979	160
Fixed Asset Accounting	1975	78
Lease Accounting	1977	12
Capital Project Accounting	1976	65
Accounts Receivable	1984	100
Employee Expense	1984	25
General Ledger	1979	35
Customer Order Processing	1979	180
Manufacturing Modules:		
Master Scheduling	1972	82
Material Requirements Planning	1974	100
Bill of Material	1975	175
Capacity Planning	1972	50
Production Order Status	1978	100
Route and Work Center Maintenance	1979	47
Shop Floor Control	1984	48
Cost Management and Tracking (CMAT)	1986	32
Utility Industry Module:		
Continuing Property Records	1985	17

Copyright 1990 by INPUT. Reproduction Prohibited.

EXHIBIT B

AMERICAN SOFTWARE INTEGRATED SOFTWARE SYSTEMS

SYSTEM/MODULES	SYSTEM/MODULES
MRP-8 - Demand Forecasting - Master Scheduling - Material Requirements Planning - Bill of Material - Capacity Planning - Production Order Status - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request DRP-8 - Demand Forecasting - Inventory Planning - Distribution Requirements Planning - Inventory Deployment - Vehicle Scheduling and Loading - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request FINANCIAL-8 - Accounts Payable - Purchasing - Capital Project Accounting - Customer Order Processing - Accounts Receivable - Inventory Control and Accounting - Fixed Asset Accounting - General Ledger UTILITIES-8 - Inventory Management - Work Orders - Procurement - Financial/Accounting	HEALTHCARE-8 - Accounts Payable - Demand Forecasting - Distribution Inventory Management - Inventory Control and Accounting - Inventory Planning - Procurement Matching - Purchasing - Requisition Management MRP/38 - Demand Forecasting - Inventory Planning - Customer Order Entry - Master Scheduling - Material Requirements Planning - Capacity Planning - Bill of Material - Route Work Center Maintenance - Product Costing - Production Order Status - Plant Inventory - Shop Floor Control - Procurement - Financial Control DRP/38 - Demand Forecasting - Inventory Planning - Inventory Deployment - Distribution Requirements Planning - Customer Order Processing - Inventory Status and Control - Procurement - Financial Control

Copyright 1990 by INPUT. Reproduction Prohibited.

American Software's AMSOFT[R] family of end-user productivity tools include the following:

- AMSOFT QueryWriter[TM] is an adapted version of Software AG's SUPERNATURAL on-line inquiry and report writer facility.
- AMSOFT DRP-pc[TM] is an optional feature for the company's mainframe Distribution Requirements Planning system that extends planning and simulation capabilities to the PC user.
- AMSOFT Forecast-pc[TM] is an optional feature for the company's mainframe Demand Forecasting system that extends planning and simulation capabilities to the PC user.
- AMSOFT MPS-pc[TM] is an optional feature for the Master Scheduling system for PC users.
- AMSOFT QOE-pc[TM] is an order management tool designed to permit order entry on a PC with transmission to a mainframe via electronic data interchange.
- AMSOFT Buyer Workstation-pc[TM] allows Purchasing system users to source, expedite, and review receipts for immediate problem resolution.
- AMSOFT IP-pc[TM] allows Inventory Planning system users to use a PC to access data for simulations.
- AMSOFT Forecast ESP-pc[TM] provides expert system capabilities on a PC for planners.
- AMSOFT ScreenDesigner[TM] is a tool for personalized screen modification.
- AMSOFT UserHelp[TM] provides real-time information about each field on any American Software application screen.
- AMSOFT Sales-pc[TM] allows users to review selected information on a specific customer, product, product class, time period, or geographic area.
- AMSOFT Promo-pc[TM] provides marketing or forecasting planners an intelligent workstation where they can create future promotions, monitor promotions in progress, and evaluate the effectiveness of past promotions.

Support services provided by American Software in conjunction

Copyright 1990 by INPUT. Reproduction Prohibited.

with its software products include a 24-hour hotline service, on-site implementation assistance, training courses, and documentation materials.

Through its Professional Services Division, American Software provides specialized consulting, custom programming, on-site installation, and extended training services. These services are provided outside of the services included in the licensing of the company's software products and are typically provided under a separate contract based on time and materials used.

Industry Markets

American Software customers typically are medium and large companies or divisions of larger companies. The company has licensed its application software to approximately 1,200 customers.

- Approximately 65% of fiscal 1990 revenue was derived from the manufacturing industry.

End users include manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel, and textiles; financial institutions; the health care industry; petroleum producers; public utilities; and the transportation industry.

American Software also has joint marketing relationships with other software and hardware vendors including Computer Associates, Deloitte & Touche, Ernst & Young, Electronic Data Systems, Impell-Pacific, Intermec, Easel Corporation, Price Waterhouse, Software AG, IBM, and IBM as a Business Partner in the Industry Applications Specialist Program and as an SAA Development Partner.

Geographic Markets

Approximately 84% of American Software's fiscal 1990 revenue was derived from the U.S. and 16% was derived from international sales.

A three-year source of revenue summary follows:

Copyright 1990 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
THREE-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/90		4/89		4/88	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
U.S.	$76.2	84%	$63.4	89%	$49.8	92%
International	14.9	16%	8.2	11%	4.4	8%
TOTAL	**$91.1**	**100%**	**$71.6**	**100%**	**$54.2**	**100%**

American Software has sales offices in Atlanta, Boston, Chicago, Cleveland, Dallas, Hartford, Pittsburgh, San Francisco, and New Jersey.

International offices are located in London, Melbourne, Toronto, and Singapore.

American Software also has agents in Singapore, Malaysia, Hong Kong, Thailand, Italy, and France. During fiscal 1990, agents were also announced for Belgium, Taiwan, and Japan.

Computer Hardware and Software

American Software has the following computers installed at its headquarters in support of software development and testing:

- 1 IBM 3084Q, OS, MVS
- 2 IBM System/38s
- 1 IBM 9370
- 2 IBM AS/400s

Copyright 1990 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President
Public Corporation, OTC
Total Employees: 404
Total Revenue, Fiscal Year End 4/30/88: $54,187,000

The Company

American Software, Inc., founded in 1970, develops, markets, and supports business application software products for IBM mainframes, minicomputers, and microcomputers to clients in a range of industries, including manufacturing, distribution, utilities, banking and finance, health care, education, government, and telecommunications. The company's product line offers integrated materials management and financial control systems, including forecasting, distribution and inventory management, purchasing and materials control, manufacturing resource planning, and financial applications. American Software also provides a range of professional services through its Professional Services Division.

The company's strategy has been to create an integrated line of standard application software products designed to be used either singly or in combination to meet unique customer requirements. To help further increase its market share in certain vertical markets (manufacturing, distribution, utilities, health care, and banking), American Software has expanded its basic software to support specific industry functions.

Fiscal 1988 revenue reached $54.2 million, a 16% increase over fiscal 1987 revenue of $46.7 million. Net income increased 17%, from $8.8 million in fiscal 1987 to over $10.3 million in fiscal 1988. A five-year financial summary follows:

Copyright 1989 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

	FISCAL YEAR				
ITEM	4/88	4/87	4/86	4/85	4/84
Revenue	$54,187	$46,727	$38,289	$29,575	$21,078
• Percent increase from previous year	16%	22%	29%	40%	31%
Income before taxes	$16,665	$15,497	$10,057	$9,670	$7,707
• Percent increase from previous year	8%	54%	4%	25%	34%
Net income	$10,335	$8,805	$5,915	$5,470	$4,233
• Percent increase from previous year	17%	49%	8%	29%	28%
Earnings per share	$1.00	$0.85	$0.59	$0.57	$0.44
• Percent increase from previous year	18%	44%	3%	30%	8%

Revenue for the six months ending October 31, 1988 reached $30.2 million, a 22% increase over revenue of $24.7 million for the same period in 1987. Net income for the period rose 76%, from $3.8 million to $6.6 million.

As of April 30, 1988, American Software had 404 full-time employees, segmented as follows:

Marketing and sales	106
Customer support/professional services	86
Product development and technical support	167
Accounting and administration	45
	404

Major competitors include Management Science America, McCormack & Dodge, Cullinet, and IBM.

Key Products and Services

Approximately 59% of American Software's fiscal 1988 revenue was derived from application software product license fees, 19% was derived from software maintenance and associated support services, and 22% was derived from consulting and programming professional services.

Copyright 1989 by INPUT. Reproduction Prohibited.

A three-year summary of source of revenue follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ thousands)

	FISCAL YEAR					
	4/88		4/87		4/86	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Forecasting and Inventory Management software	$6,931	13%	$8,053	17%	$7,397	19%
Purchasing, Materials Control, and Financial software	24,938	46%	21,110	45%	15,140	40%
Maintenance, education, consulting, and other	10,534	19%	9,489	20%	7,722	20%
Professional services	11,784	22%	8,075	17%	6,335	16%
Contract research	--	--	--	--	1,695	4%
TOTAL	**$54,187**	**100%**	**$46,727**	**100%**	**$38,289**	**100%**

American Software provides an integrated line of cross industry and industry specific application software products that can be used either individually or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- The products are written in ANS COBOL and are available for batch and on-line environments.

American Software's products are summarized in Exhibit A and include the following:

- Forecasting and Inventory Management software consists of five software modules designed to provide the user with accurate sales forecasts in order to minimize investment in inventory and to distribute more effectively such inventory.

- Purchasing and Materials Control software consists of 22 modules that provide information concerning the status of purchasing activities, and financial and manufacturing operations. Several modules (cross-industry modules) support

Copyright 1989 by INPUT. Reproduction Prohibited.

the general financial and operational functions of most businesses. Manufacturing modules assist the user in planning and controlling work flow in a manufacturing operation.

While American Software's products can be used individually, they are frequently used in combination with one another as an integrated system. The company's integrated systems, summarized in Exhibit B, are each tailored to a specific business orientation and include the following:

- Manufacturing Resource Planning (MRP-8®), for IBM and compatible mainframes, converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions, and provides for accurate shipment dates.

- Distribution Resource Planning (DRP-8®), for IBM and compatible mainframes, is an extension of MRP-8 for the distribution industry. DRP-8 converts sales forecasts at each shipment location into requirements that are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements.

- FINANCIAL-8®, for IBM and compatible mainframes, is a financial control system that can be integrated with MRP-8 and DRP-8.

- UTILITIES-8®, for IBM and compatible mainframes, is marketed to the public utilities industry.

- HEALTHCARE-8™, for IBM and compatible mainframes, is marketed to health care facilities for materials management and financial control.

- MRP/38®, for IBM System 38 and AS/400 computers, is marketed to manufacturers.

- DRP/38®, for IBM System 38 and AS/400 computers, is marketed to the distribution industry.

- AMSOFT DS/9370™ products are versions of the company's software products designed for the IBM 9370 family of computers.

Copyright 1989 by INPUT. Reproduction Prohibited.

EXHIBIT A

AMERICAN SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED
Forecasting and Inventory Management Software		
Demand Forecasting	1971	353
Distribution Requirements Planning	1976	203
Inventory Planning	1973	168
Inventory Deployment	1976	81
Vehicle Scheduling and Loading	1979	20
Purchasing and Materials Control Software		
Inventory Control and Accounting	1978	295
Purchasing	1978	256
Material Request	1978	191
Item Information Management System	1980	187
Bid (Request for Quotation)	1984	55
Accounts Payable	1979	134
Fixed Asset Accounting	1976	53
Lease Accounting	1977	12
Capital Project Accounting	1976	54
Accounts Receivable	1984	63
Employee Expense	1984	15
General Ledger and Budgeting	1979	22
Customer Order Processing	1979	118
Master Scheduling	1972	82
Material Requirements Planning	1974	69
Bill of Material	1975	123
Capacity Planning	1972	40
Production Order Status	1978	87
Route and Work Center Maintenance	1979	47
Shop Floor Control	1984	48
Cost Management and Tracking	1986	32
Continuing Property Records	1985	17

Copyright 1989 by INPUT. Reproduction Prohibited.

EXHIBIT B

AMERICAN SOFTWARE INTEGRATED SOFTWARE SYSTEMS

SYSTEM/MODULES	SYSTEM/MODULES
MRP-8 - Demand Forecasting - Master Scheduling - Material Requirements Planning - Bill of Material - Capacity Planning - Production Order Status - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request DRP-8 - Demand Forecasting - Inventory Planning - Distribution Requirements Planning - Inventory Deployment - Vehicle Scheduling and Loading - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request FINANCIAL-8 - Accounts Payable - Purchasing - Capital Project Accounting - Customer Order Processing - Accounts Receivable - Inventory Control and Accounting - Fixed Asset Accounting - General Ledger UTILITIES-8 - Inventory Management - Work Orders - Procurement - Financial/Accounting	HEALTHCARE-8 - Accounts Payable - Demand Forecasting - Distribution Inventory Management - Inventory Control and Accounting - Inventory Planning - Procurement Matching - Purchasing - Requisition Management MRP/38 - Demand Forecasting - Inventory Planning - Customer Order Entry - Master Scheduling - Material Requirements Planning - Capacity Planning - Bill of Material - Route Work Center Maintenance - Product Costing - Production Order Status - Plant Inventory - Shop Floor Control - Procurement - Financial Control DRP/38 - Demand Forecasting - Inventory Planning - Inventory Deployment - Distribution Requirements Planning - Customer Order Processing - Inventory Status and Control - Procurement - Financial Control AMSOFT DS/9370

Copyright 1989 by INPUT. Reproduction Prohibited.

American Software's AMSOFT[R] family of end user productivity tools include the following:

- AMSOFT QueryWriter[TM] is an adapted version of Software AG's SUPERNATURAL on-line inquiry and report writer facility.
- AMSOFT DRP-pc[TM] is an optional feature for the company's mainframe Distribution Requirements Planning system that extends planning and simulation capabilities to the PC user.
- AMSOFT Forecast-pc[TM] is an optional feature for the company's mainframe Demand Forecasting system that extends planning and simulation capabilities to the PC user.
- AMSOFT MPS-pc[TM] is an optional feature to the Master Scheduling system for PC users.
- AMSOFT QOE-pc[TM] is an order management tool designed to permit order entry on a PC with transmission to a mainframe via electronic data interchange.
- AMSOFT Buyer Workstation-pc[TM] allows Purchasing system users to source, expedite, and review receipts for immediate problem resolution.
- AMSOFT IP-pc[TM] allows Inventory Planning system users to use a PC to access data for simulations.
- AMSOFT Forecast ESP-pc[TM] provides expert system capabilities on a PC for planners.
- AMSOFT ScreenDesigner[TM] is a tool for personalized screen modification.
- AMSOFT UserHelp[TM] provides real-time information about each field on any American Software application screen.
- AMSOFT Sales-pc[TM] allows users to review selected information on a specific customer, product, product class, time period, or geographic area.
- AMSOFT Promo-pc[TM] provides marketing or forecasting planners an intelligent workstation where they can create future promotions, monitor promotions in progress, and evaluate the effectiveness of past promotions.

Copyright 1989 by INPUT. Reproduction Prohibited.

Support services provided by American Software in conjunction with its software products include a 24-hour hotline service, on-site implementation assistance, training courses, and documentation materials.

Through its Professional Services Division, American Software provides specialized consulting, custom programming, on-site installation, and extended training services. These services are provided outside of the services included in the licensing of the company's software products and are typically provided under a separate contract based on time and materials used.

Industry Markets

The primary target market for American Software's products is Fortune 1000 companies. The company has licensed its application software to approximately 700 customers.

End users include manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel, and textiles; financial institutions; the health care industry; petroleum producers; public utilities; and the transportation industry.

American Software also has joint marketing relationships with other software and hardware vendors including Applied Data Research, Impell-Pacific, Price Waterhouse, Arthur Young, Software AG, and IBM as a Business Partner in the Industry Applications Specialist Program and Marketing Assistance Program.

Geographic Markets

Approximately 92% of American Software's fiscal 1988 revenue was derived from the U.S. and 8% was derived from international sales.

A three-year source of revenue summary follows:

Copyright 1989 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
THREE-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/88		4/87		4/86	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
U.S.	$49.8	92%	$38.5	82%	$35.1	92%
International	4.4	8%	8.2	18%	3.2	8%
TOTAL	**$54.2**	**100%**	**$46.7**	**100%**	**$38.3**	**100$**

American Software has sales offices in Atlanta, Boston, Chicago, Los Angeles, Minneapolis, Dallas, Denver, Philadelphia, Houston, Pittsburgh, San Francisco, and New York.

International offices are located in Brussels, Toronto, and Singapore.

In December 1987, American Software entered into a joint marketing agreement with Charbonnages de France Informatique (CdFI), a branch company marketing its own financial and human resources software in France. The agreement allows CdFI to market American Software's products in France and certain French speaking parts of Europe.

Computer Hardware and Software

American Software has the following computers installed at its headquarters in support of software development and testing:

- 1 IBM 3084, OS, MVS.
- 2 IBM System 38s.
- 1 IBM 9370.
- 1 IBM AS/400.

Copyright 1989 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO PROFILE DATED SEPTEMBER 1986

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President
Public Corporation, OTC
Total Employees: 379
Total Revenue, Fiscal Year End
4/30/87: $46,727,421

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	4/87	4/86	4/85	4/84	4/83
Revenue	$ 46,727	$ 38,289	$ 29,575	$ 21,078	$ 16,090
. Percent increase from previous year	22%	29%	40%	31%	84%
Income before taxes	$ 15,497	$ 10,057	$ 9,670	$ 7,707	$ 5,738
. Percent increase from previous year	54%	4%	25%	34%	498%
Net income	$ 8,805	$ 5,915	$ 5,470	$ 4,233	$ 3,319
. Percent increase from previous year	49%	8%	29%	28%	415%
Earnings per share (a)	$ 0.85	$ 0.59	$ 0.57	$ 0.44	$ 0.41
. Percent increase from previous year	44%	3%	30%	8%	408%

(a) Restated to reflect a 3-for-2 stock split in the form of a 50% stock dividend payable to shareholders of record on March 16, 1987.

- American Software's management attributes the company's growth to the following factors:
 - Increased growth of the company's sales force.
 - Increased penetration of the international market and the health care and financial industries.
- Revenue for the three months ending July 31, 1987 was $11.2 million, a 12% increase over $10 million for the same period in 1986. Net income declined 24% to $1.3 million from $1.7 million for the same period a year ago.

©1987 by INPUT. Reproduction Prohibited.

- In April 1987, American Software formed a Far East sales office in Singapore. The office serves as the Far Eastern headquarters.

SOURCE OF REVENUE

- Approximately 83% of American Software's fiscal 1987 revenue was derived from application software products and associated support services and 17% from professional services. A three-year summary of source of revenue as provided by American Software follows ($ thousands):

ITEM \ FISCAL YEAR	6/87	6/86	6/85
Forecasting and Inventory Management Software	$ 8,053	$ 7,397	$ 8,165
. Percent increase (decrease) from previous year	9%	(9%)	(2%)
Purchasing, Materials Control, and Financial Software	$ 21,110	$ 15,140	$ 11,250
. Percent increase from previous year	39%	35%	37%
Maintenance, Education Consulting, and Other	$ 9,489	$ 7,722	$ 5,945
. Percent increase from previous year	23%	30%	50%
Services Division	$ 8,075	$ 6,335	$ 590
. Percent increase from previous year	27%	974%	-
PruTech Research and Development Contract	-	$ 1,695	$ 3,625
. Percent increase (decrease) from previous year	-	(53%)	522%
Total	$ 46,727	$ 38,289	$ 29,575

- Approximately 82% of American Software's fiscal 1987 revenue was derived from the U.S. and 18% from international sources.

- As of April 1987, American Software served 600 customers. No one customer accounted for more than 10% of the company's revenue in fiscal 1987.

©1987 by INPUT. Reproduction Prohibited.

NEW PRODUCTS AND SERVICES

- In June 1987, American Software announced AMSOFT® DS/9370™, a new line of departmental products designed for the IBM 9370 Information System family of computers.

©1987 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President
Public Corporation, OTC
Total Employees: 289
Total Revenue, Fiscal Year End 4/30/86: $38,288,622

THE COMPANY

- American Software, Inc., founded in 1970, develops, markets, and supports application software products used primarily in the areas of forecasting and inventory management, purchasing and materials control, and order processing and receivables control. The company's products are available for IBM and compatible mainframes and IBM System/38 minicomputers. American Software also provides a range of professional services through its Services Division.

- The company's strategy has been to create an integrated line of standard application software products designed to be used either singly or in combination to meet unique customer requirements. To help increase its market share in certain vertical markets (manufacturing, distribution, utilities, health care, and banking), American Software has expanded its basic software to support specific industry functions.

- Fiscal 1986 revenue reached $38.3 million, a 29% increase over fiscal 1985 revenue of $29.6 million. Net income rose 8%, from $5.5 million in fiscal 1985 to $5.9 million in fiscal 1986. A five-year financial summary follows:

©1986 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	4/86	4/85	4/84	4/83	4/82
Revenue	$ 38,289	$ 29,575	$ 21,078	$ 16,090	$ 8,754
. Percent increase from previous year	29%	40%	31%	84%	37%
Income before taxes	$ 10,057	$ 9,670	$ 7,707	$ 5,738	$ 959
. Percent increase (decrease) from previous year	4%	25%	34%	498%	(20%)
Net income	$ 5,915	$ 5,470	$ 4,233	$ 3,319	$ 644
. Percent increase (decrease) from previous year	8%	29%	28%	415%	(1%)
Earnings per share (a)	$ 0.89	$ 0.86	$ 0.66	$ 0.61	$ 0.12
. Percent increase from previous year	3%	30%	8%	408%	-

(a) Restated to reflect a 3-for-2 stock split in the form of a 50% stock dividend payable to shareholders of record on April 1, 1985.

- Revenue growth over the past three years has resulted primarily from software license fees and fees for related services, representing both volume and price increases. Volume increases resulted from expansion of the company's markets, greater penetration of existing markets, and the introduction of new products and additional features to existing products.

 - Selling, general, and administrative expenses rose 41% during fiscal 1986. American Software management states that with increased competition in the software industry, sales cycles are prolonged and increased sales and support efforts are required.

 - Research and development expenditures were approximately $4.7 million (12% of revenue) in fiscal 1986, $4.3 million (14% of revenue), in fiscal 1985, and $3.2 million (15% of revenue) in fiscal 1984. Efforts have focused on adapting the company's products to function with popular data base management systems and new product enhancements.

- During September 1985 American Software completed a public offering of 500,000 shares of its Class A common stock. Estimated proceeds of $4.5 million are being used for working capital.

©1986 by INPUT. Reproduction Prohibited.

- In December 1983 American Software entered into a $5.1 million joint venture agreement with PruTech Research and Development Partnership to develop an accounts receivable system for IBM mainframes and a manufacturing management group of systems for the IBM System/38. All funding for the project was contributed by PruTech. During fiscal 1985 PruTech provided approximately $1.2 million for the development of additional IBM System/38 manufacturing management software.

 - Revenue recognized and costs incurred with regard to these projects were approximately $1.7 million and $1.4 million in fiscal 1986, $3.6 million and $1.9 million in fiscal 1985, and $583,000 and $208,000 in fiscal 1984, respectively.

 - The development projects were completed during fiscal 1985 and 1986. American Software is now marketing the systems along with its existing product lines.

 - PruTech will initially receive royalties of approximately 20% on license fees from products covered by these agreements.

- In October 1985 American Software acquired marketing rights to certain financial packages from Arthur Young & Company to complement its line of IBM System/38 products for manufacturing and distribution. These products included Accounts Payable, Accounts Receivable, and General Ledger systems.

- Revenue for the three months ending July 31, 1986 reached $10 million, a 13% increase over $8.8 million for the same period in 1985. Net income was $1.7 million compared to $1.3 million for the same period a year ago.

- American Software has two subsidiaries, as follows:

 - The American Software Research and Development Corporation, a subsidiary formed in December 1983, provided contract research and development services to PruTech.

 - American Software FSC, Inc. is a foreign sales corporation under the IRS tax rules.

- As of April 30, 1986 American Software had 289 full-time employees, segmented as follows:

Marketing and sales	72
Customer support/professional services	38
Product development and technical support	144
Accounting and administration	35
	289

©1986 by INPUT. Reproduction Prohibited.

- Major competitors include Management Science America, McCormack & Dodge, Cullinet, and IBM.

KEY PRODUCTS AND SERVICES

- Approximately 79% of American Software's fiscal 1986 revenue was derived from application software products and associated support services and 21% from professional services. A three-year summary of source of revenue, as provided by American Software, follows ($ thousands):

ITEM / FISCAL YEAR	4/86	4/85	4/84
Forecasting and Inventory Management Software	$ 7,397	$ 8,165	$ 8,348
. Percent increase (decrease) from previous year	(9%)	(2%)	N/A
Purchasing, Materials Control, and Financial Software	$ 15,140	$ 11,250	$ 8,185
. Percent increase from previous year	35%	37%	N/A
Maintenance, Education, Consulting, and Other	$ 7,722	$ 5,945	$ 3,962
. Percent increase from previous year	30%	50%	N/A
Services Division	$ 6,335	$ 590	-
. Percent increase from previous year	974%	-	-
PruTech Research and Development Contract	$ 1,695	$ 3,625	$ 583
. Percent increase (decrease) from previous year	(53%)	522%	-
Total Revenue	$ 38,289	$ 29,575	$ 21,078

- American Software provides an integrated line of standard application software products that can be used either individually or in combination to assist customers in forecasting and inventory management, in purchasing and materials control, and in order processing and receivables control.
 - The products are written in ANS COBOL and run on IBM and plug-compatible mainframes under OS and DOS.
 - Packages are available in both batch and on-line versions.

©1986 by INPUT. Reproduction Prohibited.

- The software was principally designed for use with IBM's CICS systems software.

- During fiscal 1986, 1985, and 1984, a substantial portion of American Software's research and development expenditures have been devoted to adapting its products to function in other IBM data bases and data communications environments including DLI/CICS, IMS DB/DC, IDMS/CICS, DATACOM DB/CICS, and ADABAS/CICS.

- American Software's mainframe software products are listed in Exhibit A and are described below.

 - Forecasting and Inventory Management software consists of five modules designed to provide the user with accurate sales forecasts in order to minimize investment in inventory and to distribute more effectively such inventory. These modules perform primarily the following functions:

 . Demand Forecasting analyzes historical demand for products sold or goods and materials used, and projects future demand.

 . Inventory Planning computes inventory safety stock and ordering quantities on the basis of management-specified customer service levels and inventory turnover objectives.

 . Distribution Requirements Planning recommends a time-phased replenishment plan for all levels in a distribution network, utilizing sales forecasts, existing inventory information, and inventory control parameters.

 . Inventory Deployment determines most effective use of available inventory and allocates the available quantity such that each warehouse received an equitable portion.

 . Vehicle Scheduling and Loading specifies the actual replenishment quantities that should be shipped from a source location to a receiving location, taking into consideration the capacity and number of available vehicles.

 - Purchasing and Materials Control Software consists of an integrated system of 20 modules which provides information concerning the status of purchasing activities, and financial and manufacturing operations. Several modules support the general financial and operational functions of most businesses and are frequently referred to as cross-industry modules. In addition, manufacturing modules assist the user in planning and controlling work flow in a manufacturing operation. These modules perform primarily the following functions:

©1986 by INPUT. Reproduction Prohibited.

EXHIBIT A

AMERICAN SOFTWARE MAINFRAME SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED	BASE PRICE
Demand Forecasting	1971	350	$22,000
Inventory Planning	1973	125	33,000
Distribution Requirements Planning	1976	150	36,000
Inventory Deployment	1976	30	45,000
Vehicle Schedule and Loading	1979	12	30,000
Inventory Control and Accounting	1978	150	54,000
Purchasing	1978	130	54,000
Material Request	1978	110	54,000
Item Information Management System	1980	95	30,000
Bid	1984	20	59,000
Accounts Payable	1979	60	43,000
Fixed Asset Accounting	1976	60	30,000
Lease Accounting	1977	10	10,000
Capital Project Accounting	1976	N/A	24,000
Accounts Receivable	1984	10	97,000
Employee Expense	1984	6	32,000
General Ledger and Budgeting	1979	35	90,000
Customer Order Processing	1979	80	119,000
Master Scheduling	1972	50	28,000
Material Requirements Planning	1974	50	22,000
Bill of Material	1975	45	27,000
Capacity Planning	1972	15	13,000
Production Order Status	1978	15	28,000
Route and Work Center Maintenance	1979	20	19,000
Cost Management and Tracking	1986	7	35,000
Shop Floor Control	1984	19	27,000
Continuing Property Records	1985	7	57,000

©1986 by INPUT. Reproduction Prohibited.

- Cross-Industry Modules:

 - Inventory Control and Accounting processes inventory activities, provides accurate status updates, and maintains price and cost details.

 - Purchasing produces updates, and continuously monitors the status of requisitions and purchase orders for goods and services.

 - Material Request communicates material requirements to purchasing functions resulting in cohesive, centralized procurement activities.

 - Item Information Management System converts manufacturer's part numbers into the user's inventory item identification system and provides real-time inquiry and reports on the status of user's inventory.

 - Bid (Request for Quotation) produces bids from existing data, updates bids with vendors' responses, selects the desired bid, and produces the resulting purchase order in an on-line real-time environment.

 - Accounts Payable processes invoices, creates separate accounts for multiple companies, maintains vendor history, activity and standard terms, prints checks, and projects cash flow.

 - Fixed Asset Accounting maintains property and tax records, and prepares depreciation schedules for accounting and tax purposes.

 - Lease Accounting tracks and reports gross amounts of assets recorded under capital leases.

 - Capital Project Accounting tracks and accumulates project commitments and expenditures and then compares to budgets.

 - Accounts Receivable provides the functions and features needed to support cash application for trade receivables and maintains real-time customer account information.

 - Employee Expense processes all types of employee expenses such as travel, entertainment, relocation, tuition refund, etc.; identifies reimbursable and non-reimbursable expenses and processes central billing.

©1986 by INPUT. Reproduction Prohibited.

- General Ledger and Budgeting is comprised of five basic subsystems which provide financial data base, general ledger, transaction processing, management reporting, and budgeting planning functions.

- Customer Order Processing performs customer order entry, status inquiry, order processing, and shipping and invoicing functions.

. Manufacturing Modules:

- Master Scheduling prepares a production plan consistent with existing and anticipated customer orders, available inventory, production capacity, and available resources.

- Material Requirements Planning calculates manufacturing and purchasing requirements at appropriate manufacturing stages.

- Bill of Material maintains information on all component parts for each product.

- Capacity Planning projects workloads at various work centers based upon the master schedule and/or material requirements plan.

- Production Order Status provides inventory quantities and current manufacturing order status and inventory information.

- Route and Work Center Maintenance acts as a storehouse of information that is accessed by other Manufacturing Systems and establishes production work center routings.

- Cost Management and Tracking.

- Shop Floor Control.

. Utilities Industry Module:

- Continuing Property Records accounts for public utilities property including both specific and mass property, maintains property and tax records, and prepares depreciation schedules for accounting and tax purposes.

• While American Software's products can be used individually, they are frequently used in combination with one another as an integrated system. The company markets four integrated systems, each tailored to a specific business orientation, as follows:

©1986 by INPUT. Reproduction Prohibited.

- Manufacturing Resource Planning (MRP-8®) converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions, and provides for accurate shipment dates. Applications modules include:

 . Demand Forecasting.
 . Master Scheduling.
 . Material Requirements Planning.
 . Bill of Material.
 . Capacity Planning.
 . Production Order Status.
 . Customer Order Processing.
 . Purchasing.
 . Inventory Control and Accounting.
 . Accounts Payable.
 . Material Request.

- Distribution Resource Planning (DRP-8®) is an extension of MRP-8 for the distribution industry. DRP-8 converts sales forecasts at each shipment location into requirements which are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements. Applications modules include:

 . Demand Forecasting.
 . Inventory Planning.
 . Distribution Requirements Planning.
 . Inventory Deployment.
 . Vehicle Scheduling and Loading.
 . Customer Order Processing.
 . Purchasing.
 . Inventory Control and Accounting.
 . Accounts Payable.
 . Material Request.

- FINANCIAL-8® is a financial control system which can be integrated with MRP-8 and DRP-8. Modules include:

 . Accounts Payable.
 . Purchasing.
 . Capital Project Accounting.
 . Customer Order Processing.
 . Accounts Receivable.
 . Inventory Control and Accounting.
 . Fixed Asset Accounting.

©1986 by INPUT. Reproduction Prohibited.

- UTILITIES-8® is marketed to the public utilities industry. Modules include:

 - Maintenance Repair Operations.
 - Requisition Management.
 - Procurement.
 - Inventory Control and Accounting.
 - Accounts Payable.
 - Continuing Property Records.
 - Demand Forecasting.
 - Inventory Management.

- HEALTHCARE-8™ is marketed to health care facilities for materials management and financial control. Modules include:

 - Accounts Payable.
 - Demand Forecasting.
 - Distribution Inventory Management.
 - Inventory Control and Accounting.
 - Inventory Planning.
 - Procurement Matching.
 - Purchasing.
 - Requisition Management.

- In October 1985 American Software announced MRP/38™ and DRP/38™, a line of financial, manufacturing, and distribution software for the IBM System/38.

 - Typical customers for these products are mid-size companies in the $25-50 million range and divisions of Fortune 1000 companies.

 - The products, marketed as pre-configured systems, are listed in Exhibit B.

- During fiscal 1986 American Software introduced the AMSOFT® family of end-user productivity tools.

 - AMSOFT QueryWriter™ is a specially adapted version of Software AG Systems' SUPERNATURAL on-line inquiry and report writer facility. It is priced at $25,000.

 - AMSOFT DRP-pc™ is an optional feature for the company's mainframe Distribution Requirements Planning System that extends planning and simulation capabilities to the PC user.

 - AMSOFT Forecast-pc™, originally introduced as ForeThought, is an optional feature for the company's mainframe Demand Forecasting System that extends planning and simulation capabilities to the PC user.

©1986 by INPUT. Reproduction Prohibited.

EXHIBIT B

AMERICAN SOFTWARE SYSTEM/38 SOFTWARE PRODUCTS

SYSTEM*	PRICE
MANUFACTURING MANAGEMENT	$110,000
• Master Scheduling	
• Material Requirements Planning	
• Capacity Planning	
• Production Order Status	
• Inventory Status and Control	
• Shop Floor Control	
• Bill of Material	
• Product Costing	
• Route Work Center Maintenance	
• Procurement	
• Customer Order Entry	
DISTRIBUTION MANAGEMENT	$210,000
• Demand Forecasting	
• Inventory Management	
• Distribution Requirements Planning	
• Customer Order Entry	
• Bill of Material	
• Inventory Status and Control	
• Procurement	
FINANCIAL CONTROL	$50,000
• General Ledger	
• Accounts Receivable	
• Accounts Payable	
• Financial Reporting	

*The systems can be re-configured to fit various industry needs. Some modules can be sold as standalone products, but are generally marketed as pre-configured systems.

©1986 by INPUT. Reproduction Prohibited.

- AMSOFT ScreenPainter™, a facility for personalized screen modification, is currently under development.

- Support services provided by American Software in conjunction with its software products include the following:
 - A 24-hour hotline service.
 - Consulting services.
 - Definition and analysis services match the customer's requirements with standard software offerings.
 - American Software can also customize its own products for integration with a customer's existing system.
 - Educational services.
 - Prospective customers receive pre-sale information regarding American Software's products through one- or two-day System Overview Seminars.
 - After the sale, a customer receives more extensive education and training, through two- or four-day Management/Technical Workshops.

- Professional services available through American Software include the following:
 - The Services Division, established in April 1984, assists American Software customers with post software delivery activities such as project management, development of methods and procedures, system design, custom and interface programming, multiple site training, and other consulting. These services are provided outside of the services included in the licensing of the company's software products.
 - The American Software Research and Development Corporation, a subsidiary formed in December 1983, provides contract research and development services.

INDUSTRY MARKETS

- The primary target market for American Software's mainframe products is Fortune 1000 companies. Since the beginning of fiscal 1978, the company has licensed its applications software to approximately 520 customers. Approximately 50% are Fortune 500 companies or divisions or subsidiaries of Fortune 500 companies.

- End users include manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel,

©1986 by INPUT. Reproduction Prohibited.

textiles, petroleum producers, as well as financial institutions, the health care industry, public utilities, and transportation.

- American Software also has joint marketing relationships with other software and hardware vendors including Applied Data Research, Impell-Pacific, Price Waterhouse, Honeywell Information Systems, and Software AG.

GEOGRAPHIC MARKETS

- Approximately 90% of American Software's fiscal 1986 revenue was derived from the U.S. and 10% was derived from foreign sources.
- The company has U.S. sales offices in Atlanta, Boston, Chicago, Denver, Houston, New York, Philadelphia, Pittsburgh, and San Francisco.
- Foreign offices are located in London, Brussels, and Toronto.

COMPUTER HARDWARE AND SOFTWARE

- The company maintains one IBM 3081, running under OS, MVS, and one IBM System/38.

©1986 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO PROFILE DATED NOVEMBER 1984

AMERICAN SOFTWARE, INC.
443 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President
Public Corporation, OTC
Total Employees: 291
Total Revenue, Fiscal Year End
4/30/85: $29,574,639

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	4/85	4/84	4/83	4/82	4/81
Revenue	$29,575	$21,078	$16,090	$8,754	$6,400
. Percent increase from previous year	40%	31%	84%	37%	58%
Income before taxes	$ 9,670	$ 7,707	$ 5,738	$ 959	$1,197
. Percent increase (decrease) from previous year	25%	34%	498%	(20%)	160%
Net income	$ 5,470	$ 4,233	$ 3,319	$ 644	$ 648
. Percent increase (decrease) from previous year	29%	28%	415%	(1%)	156%
Earnings per share (a)	$ 0.86	$ 0.66	$ 0.61	$ 0.12	$ 0.12
. Percent increase (decrease) from previous year	30%	8%	408%	-	N/A

(a) Restated to reflect a 3-for-2 stock split in the form of a 50% stock dividend payable to shareholders of record on April 1, 1985.

SOURCE OF REVENUE

- Approximately 87% of American Software's fiscal 1985 revenue was derived from applications software products and associated support services and 12% from professional services. Less than 1% of revenue was derived from processing services.

©1985 by INPUT. Reproduction Prohibited.

- A three-year summary of source of revenue, as provided by American Software, follows ($ thousands):

ITEM \ FISCAL YEAR	4/85	4/84	4/83
Forecasting and Inventory Management Software	$ 8,165	$ 7,630	$ 7,087
. Percent increase from previous year	7%	8%	63%
Purchasing, Materials Control, and Financial Software	$ 11,242	$ 8,073	$ 5,761
. Percent increase from previous year	39%	40%	236%
Maintenance, Education, Consulting, and Other	$ 6,543	$ 4,792	$ 3,242
. Percent increase from previous year	37%	48%	20%
PruTech Research and Development Contract	$ 3,625	$583	-
. Percent increase from previous year	522%	-	-
Total Revenue	$ 29,575	$ 21,078	$ 16,090

- New/enhanced products include the following:

 - In January 1985 American Software acquired the marketing rights to Price Waterhouse's on-line General Ledger System. The system is being integrated with American Software's Financial-8® accounting software to provide a complete, closed-loop system of financial applications that are also integrated with the company's manufacturing and distribution software products.

 - In January 1985 American Software began delivery of its first software product for microcomputers. The product, ForeThought T.M. , is a version of the company's Demand Forecasting System and operates on the IBM PC.

 - In May 1985 the company announced the development of an IBM PC-version of its Inventory Management/Distribution Resource Planning software product.

 - Other microcomputer products that will augment American Software's mainframe applications are also currently under development.

©1985 by INPUT. Reproduction Prohibited.

- During fiscal 1985 the company introduced the Continuing Property Records System, an accounting and reporting system designed for the utility industry.

- The company has introduced an IBM System/38-based Materials Control System for manufacturing.

- In the area of distribution, American Software has added on-line Advanced Simulation and Inventory Deployment Systems.

- In May 1985 the company announced the availability of Multiple Line Entry, a new feature for its Customer Order Processing System that allows users to enter up to 15 line items per screen.

• Recent joint marketing/development agreements announced by American Software include the following:

- In April 1985 American Software and Applied Data Research, Inc. (ADR) announced a complementary development and marketing agreement whereby American Software will develop and market versions of its materials management, distribution, and accounting systems to operate under ADR's DATACOM/DB relational data base management system and DATADICTIONARY.

 . The two companies will provide each other with product training and will provide for joint customer support.

 . American Software and ADR will continue to market the products separately.

- In March 1985 American Software announced the signing of a joint marketing agreement with Impell Pacific, a supplier of plant resource management services and systems. The agreement provides for joint marketing of the companies' complementary products: American Software's Purchasing and Materials Management System and Impell Pacific's Maintenance Management System.

- An agreement with Software AG of North America, Inc. permits Software AG's SUPERNATURAL on-line query and report writer to operate with American Software's applications. The company will market this product under the name AMSOFT® QueryWriter™.

- Another agreement with Software AG allows for ADABAS versions of American Software products.

- In January 1985 American Software and PruTech Research and Development Partnership announced an agreement to provide funding for research and development of additional products to be incorporated into American Software's line of manufacturing software for the IBM System/38.

©1985 by INPUT. Reproduction Prohibited.

- This project, valued at approximately $1.2 million, will be performed by American Software Research and Development Corporation, a subsidiary of American Software, and funded by PruTech.

- The new systems, scheduled to be complete during 1985, will provide for manufacturing control and will include Order Entry, Purchasing, Shop Floor Control, and Product Costing.

- American Software will have the right to market these products to customers worldwide.

- In January 1985 American Software completed and delivered the following systems for manufacturing planning for the IBM System/38 as part of an initial $5.1 million agreement with PruTech: Master Scheduling, Material Requirements Planning, Capacity Planning, Bill of Material, Route and Work Center Maintenance, Plant Inventory Control, and Production Order Status. Development of an Accounts Receivable System is continuing and its completion is expected within the next year.

©1985 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO HIGHLIGHT DATED SEPTEMBER 1982

AMERICAN SOFTWARE, INC.
443 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President
Public Corporation, OTC
Total Employees: 145
Total Revenue, Fiscal Year End 4/30/83: $16,090,000

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	4/83	4/82	4/81	4/80	4/79
Revenue	$16,090	$8,754	$6,400	$4,050	$2,663
. Percent increase from previous year	84%	37%	58%	52%	78%
Income before taxes	$ 5,738	$ 959	$1,197	$ 460	$ 198
. Percent increase (decrease) from previous year	498%	(20%)	160%	132%	4%
Net income	$ 3,319	$ 644	$ 648	$ 253	$ 131
. Percent increase (decrease) from previous year	415%	(1%)	156%	93%	38%
Earnings per share	$ 0.92	$ 0.18	$ 0.19	$ 0.07	$ 0.04
. Percent increase (decrease) from previous year	411%	(5%)	171%	75%	33%

- In February 1983 American Software, Inc. made an initial public offering of 1,750,000 shares of its common stock, 750,000 sold by the company and one million by stockholders.
 - Proceeds of approximately $16.4 million will be used to upgrade and acquire data processing equipment; to finance software research, development, and enhancements; to expand Atlanta headquarter and branch office facilities; and to provide working capital for general corporate purposes.

SOURCE OF REVENUE

- Virtually all of American Software's fiscal 1983 revenue was derived from applications software. Less than 1% of revenue was from processing services.

©1983 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
443 East Paces Ferry Road
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President
Private Corporation
Total Employees: 100
Total Revenue, Fiscal Year End
4/30/82: $9,200,000

THE COMPANY

- American Software, Inc., founded in 1970 by the current chairman and president, develops and markets applications software and provides remote computing services primarily to the manufacturing and distribution industries.

- Fiscal 1982 revenue reached $9.2 million, a 48% increase over fiscal 1981 revenue of $6.2 million. A five-year revenue summary follows:

AMERICAN SOFTWARE
FIVE-YEAR REVENUE SUMMARY
($ thousands)

ITEM \ FISCAL YEAR	4/82	4/81	4/80	4/79	4/78
Revenue	$ 9,200	$ 6,200	$ 4,225	$ 2,500	$ 1,500
. Percent increase from previous year	48%	47%	69%	67%	N/A

- Management estimates that fiscal 1983 revenue will reach $13 million.

- As of April 1982, American Software had 100 employees. In July 1982 there were 105 employees, divided as follows:

Marketing/sales	30
Software development	30
Customer support	25
Computer operations	5
General and administrative	15
	105

KEY PRODUCTS AND SERVICES

- Approximately 98% of American Software's fiscal 1982 revenue was derived from applications software products and related services. The remaining 2% was derived from processing services.

©1982 by INPUT. Reproduction Prohibited.

- American Software offers 20 software products which can be purchased individually or as part of one of three integrated software systems.
 - The software runs on IBM and plug-compatible mainframes under OS and DOS, as well as on a variety of minicomputers.
 - Packages are available in both batch and on-line versions.
 - The customer may choose from a variety of optional features, standard modifications, and specified custom modifications (for which there are additional charges).
- The three integrated software systems are described as follows:
 - Manufacturing Resource Planning (MRP-8T.M.) converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions, and provides for accurate shipment dates. Applications modules include:
 - Sales Forecasting.
 - Master Scheduling.
 - Material Requirements Planning.
 - Bill of Material.
 - Capacity Planning.
 - Production Activity Control.
 - Customer Order Processing.
 - Purchasing and Materials Management (five modules).
 - Distribution Resource Planning (DRP-8T.M.) is an extension of MRP-8 for the distribution industry. DRP-8 converts sales forecasts at each shipment location into requirements which are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements. Applications modules include:
 - Sales Forecasting.
 - Inventory Controller.
 - Distribution Requirements Planning.
 - Inventory Allocation.
 - Truck/Car Loading.
 - Vendor Joint Replenishment.
 - Customer Order Processing.
 - Purchasing and Materials Management (five modules).
 - FINANCIAL-8T.M. is a financial control system which can be integrated with MRP-8 and DRP-8. Modules include:
 - Accounts Payable.
 - Purchasing.

©1982 by INPUT. Reproduction Prohibited.

- Procurement Matching.
- Capital Project Accounting.
- Customer Order Processing.
- Accounts Receivable (available in 1983).
- Inventory Control and Accounting.
- Fixed Asset Accounting.

- One or more of the software modules within FINANCIAL-8, DRP-8, and MRP-8 can be installed as the first phase of a customer's software enhancement plans, with subsequent phases including selected products as required.

- Major clients include: Polaroid Corporation, Hesston Corporation, Warner-Lambert Company, Dow Corning Corporation, and McGraw Edison Company.

- American Software's products are listed in the exhibit.

- The company provides consulting services in conjunction with its software products.

 - Definition and analysis services match the customer's requirements with standard software offerings.

 - American Software can also customize its own products for integration with a customer's existing system.

- American Software provides scheduled educational programs to prospective users.

 - Overview Seminars are presented at no cost and describe American Software's systems capabilities.

 - Technical workshops provide detailed information on applications areas and specific product features.

- American Software provides batch and remote batch computing services on an interim basis only. All American Software products are available as applications on its network.

INDUSTRY MARKETS

- American Software's revenue is derived from the following industry sectors:

Discrete manufacturing	30%
Process manufacturing	60
Other (distribution, transportation, utilities, banking)	10
	100%

- Clients include over 100 companies from the Fortune 500.

©1982 by INPUT. Reproduction Prohibited.

EXHIBIT

**AMERICAN SOFTWARE –
SOFTWARE PRODUCTS**

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED	BASE PRICE
Sales Forecasting	1971	200+	$18,000
Inventory Controller	1973	15	$28,000
Purchasing and Materials Management			
• Purchasing	1978	10+	$35,000
• Inventory Control and Accounting	1978	10+	$25,000
• Procurement Matching	1979	7	$15,000
• Accounts Payable	1979	10+	$25,000
• Material Request	1978	10+	$35,000
Distribution Requirements Planning	1976	10	$28,000
Inventory Allocation	1976	15	$13,000
Truck/Car Loading	1979	5	$18,000
Vendor Joint Replenishment	1981	2	$22,000
Customer Order Processing	1979	3	$80,000
Master Scheduling	1972	12	$30,000
Material Requirements Planning	1974	14	$30,000
Bill of Material	1975	14	$25,000
Capacity Planning	1972	10	$20,000
Production Activity Control	1978	10	NA
Capital Project Accounting	1976	NA	$ 8,000
Fixed Asset Accounting	1976	50	$ 6,000

©1982 by INPUT. Reproduction Prohibited.

GEOGRAPHIC MARKETS

- Geographic revenue is distributed as follows:

United States	82%
Canada	8
Europe	6
Other international	4
	100%

- American Software maintains branch offices in Boston, Chicago, Minneapolis, Philadelphia, San Francisco, and Toronto.

COMPUTER HARDWARE AND SOFTWARE

- The company maintains one IBM 3031, running under OS/MVS.
- Clients access American Software's network via dial-up telephone lines.

©1982 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
470 East Paces Ferry Road, N.E.
Atlanta, GA 30305
(404) 261-4381

Thomas L. Newberry, Chairman
James C. Edenfield, President and CEO
Public Corporation, NASDAQ
Total Employees: 804 (4/91)
Total Revenue, Fiscal Year End
4/30/91: $101,853,974

The Company

American Software, Inc., founded in 1970, develops, markets, and supports business applications software products for IBM mainframes, minicomputers, and microcomputers to clients in a range of industries, including manufacturing, distribution, utilities, banking and finance, health care, education, government, and transportation. The company's product line offers integrated materials management and financial control systems, including order management, forecasting, distribution and inventory management, purchasing and materials control, manufacturing resource planning, and financial applications. American Software also provides a range of professional services through its Professional Services Division.

The company's strategy has been to create an integrated line of standard applications software products for IBM ES/370 and AS/400 platforms. The products are designed to be used either singly or in combination to meet unique customer requirements. To help further increase its market share in certain vertical markets (manufacturing, distribution, utilities, health care, and banking), American Software has expanded its basic software to support specific industry functions.

Fiscal 1991 revenue reached $101.9 million, a 10% increase over fiscal 1990 revenue of $92.8 million. Net income was $17.5 million in fiscal 1991, compared to $19.5 million in fiscal 1990. In the five-year summary that follows, results prior to fiscal 1991 have been restated to reflect a change in the method of recognizing software revenue:

Copyright 1992 by INPUT. Reproduction Prohibited.

AMERICAN SOFTWARE, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR					
ITEM	4/91	4/90	4/89	4/88	4/87	CAGR
Revenue	$101.9	$92.8	$73.5	$52.4	$43.2	24%
· Percent increase from previous year	10%	26%	40%	21%	N/A	
Income before taxes	$26.7	$30.1	$24.8	$15.0	$12.1	22%
· Percent increase (decrease) from previous year	(11%)	21%	65%	24%	N/A	
· Gross margin	26%	32%	34%	29%	28%	
Net income	$17.5	$19.5	$16.3	$9.3	$7.1	25%
· Percent increase (decrease) from previous year	(10%)	20%	75%	31%	N/A	
· Net margin	17%	21%	22%	18%	16%	
Earnings per share	$0.75	$0.86	$0.72	$0.40	$0.32	24%
· Percent increase (decrease) from previous year	(13%)	19%	80%	29%	N/A	

Revenue for the six months ending October 31, 1991 reached $54.0 million, a 9% increase over $49.4 million for the same period in 1990. Net income was over $8.7 million, about the same as last year.

As of April 30, 1991, American Software had 804 full-time employees (with revenue per employee at $126,684), segmented as follows:

Marketing and sales	155
Customer support/professional services	195
Product development and technical support	388
Accounting and administration	66
	804

Major competitors include D & B Software, Computer Associates, and IBM.

Copyright 1992 by INPUT. Reproduction Prohibited.

Key Products and Services

Approximately 46% of American Software's fiscal 1991 revenue was derived from applications software product license fees; 14% was derived from software maintenance; and 40% was derived from education and training, consulting, and programming professional services.

A three-year summary of source of revenue follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/91		4/90		4/89	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Purchasing, Materials Control, and Financial software	$36.8	37%	$34.5	39%	$30.8	41%
Forecasting and Inventory Management software	10.2	9%	9.1	8%	8.5	12%
Maintenance	13.7	14%	11.6	12%	9.3	13%
Professional services	41.2	40%	37.6	41%	24.9	34%
TOTAL	**$101.9**	**100%**	**$92.8**	**100%**	**$73.5**	**100%**

American Software provides an integrated line of cross-industry and industry-specific applications software products that can be used either individually or in combination to assist customers in forecasting and inventory management, purchasing and materials control, and order processing and receivables control.

- The products are written in ANS COBOL and are available for batch and on-line environments.

American Software's products are summarized in Exhibit A and include the following:

- Forecasting and Inventory Management software consists of five software modules designed to provide the user with accurate sales forecasts in order to minimize investment in inventory and to distribute inventory more effectively.

- Purchasing and Materials Control software consists of 24 modules that provide information concerning the status of

Copyright 1992 by INPUT. Reproduction Prohibited.

purchasing activities, and financial and manufacturing operations. Several modules (cross-industry modules) support the general financial and operational functions of most businesses. Manufacturing modules assist the user in planning and controlling work flow in a manufacturing operation.

While American Software's products can be used individually, they are frequently used in combination as an integrated system. The company's integrated systems, summarized in Exhibit B, are each tailored to a specific business orientation and include the following:

- Manufacturing Resource Planning (MRP-8®), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), converts sales forecasts into a master schedule, determines component and raw material requirements, insures the feasibility of resulting production and purchasing decisions, and provides for accurate shipment dates.

- Distribution Resource Planning (DRP-8®), for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is an extension of MRP-8 for industries involved in distribution. DRP-8 converts sales forecasts at each shipment location into requirements that are placed on the specific item's source of supply. All individual warehouse replenishment requirements are aggregated to produce total network requirements.

- FINANCIAL-8®, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is a financial control system that can be integrated with MRP-8 and DRP-8.

- UTILITIES-8®, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to the public utilities industry.

- HEALTHCARE-8™, for IBM and compatible mainframes (including ES/370, ES/390, and AS/400 systems), is marketed to health care facilities for materials management and financial control.

- MRP/38®, for IBM System/38 and AS/400 computers, is marketed to manufacturers.

- DRP/38®, for IBM System/38 and AS/400 computers, is marketed to the distribution industry.

Copyright 1992 by INPUT. Reproduction Prohibited.

EXHIBIT A

AMERICAN SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED
Forecasting and Inventory Management Software		
Demand Forecasting	1971	350
Distribution Requirements Planning	1976	220
Inventory Planning	1973	200
Inventory Deployment	1976	100
Vehicle Scheduling and Loading	1979	25
Purchasing and Materials Control Software		
Cross Industry Modules:		
Inventory Control and Accounting	1978	380
Purchasing	1978	330
Material Request	1978	230
Item Information Management System	1980	187
Bid (Request for Quotation)	1984	85
Accounts Payable	1979	160
Fixed Asset Accounting	1975	78
Lease Accounting	1977	12
Capital Project Accounting	1976	65
Accounts Receivable	1984	100
Employee Expense	1984	25
General Ledger	1979	35
Customer Order Processing	1979	180
Maintenance Management System	1991	15
Warehouse Management System	1991	1
Manufacturing Modules:		
Master Scheduling	1972	82
Material Requirements Planning	1974	100
Bill of Material	1975	175
Capacity Planning	1972	50
Production Order Status	1978	100
Route and Work Center Maintenance	1979	47
Shop Floor Control	1984	48
Cost Management and Tracking (CMAT)	1986	32
Utility Industry Module:		
Continuing Property Records	1985	17

Copyright 1992 by INPUT. Reproduction Prohibited.

EXHIBIT B

AMERICAN SOFTWARE INTEGRATED SOFTWARE SYSTEMS

SYSTEM/MODULES	SYSTEM/MODULES
MRP-8 - Demand Forecasting - Master Scheduling - Material Requirements Planning - Bill of Material - Capacity Planning - Production Order Status - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request DRP-8 - Demand Forecasting - Inventory Planning - Distribution Requirements Planning - Inventory Deployment - Vehicle Scheduling and Loading - Customer Order Processing - Purchasing - Inventory Control and Accounting - Accounts Payable - Material Request FINANCIAL-8 - Accounts Payable - Purchasing - Capital Project Accounting - Customer Order Processing - Accounts Receivable - Inventory Control and Accounting - Fixed Asset Accounting - General Ledger UTILITIES-8 - Inventory Management - Work Orders - Procurement - Financial/Accounting	HEALTHCARE-8 - Accounts Payable - Demand Forecasting - Distribution Inventory Management - Inventory Control and Accounting - Inventory Planning - Procurement Matching - Purchasing - Requisition Management MRP/38 - Demand Forecasting - Inventory Planning - Customer Order Entry - Master Scheduling - Material Requirements Planning - Capacity Planning - Bill of Material - Route Work Center Maintenance - Product Costing - Production Order Status - Plant Inventory - Shop Floor Control - Procurement - Financial Control DRP/38 - Demand Forecasting - Inventory Planning - Inventory Deployment - Distribution Requirements Planning - Customer Order Processing - Inventory Status and Control - Procurement - Financial Control

Copyright 1992 by INPUT. Reproduction Prohibited.

American Software's AMSOFT[R] family of end-user productivity tools include the following:

- AMSOFT QueryWriter™ is an adapted version of Software AG's SUPERNATURAL on-line inquiry and report writer facility.
- AMSOFT DRP-pc™ is an optional feature for the company's mainframe Distribution Requirements Planning system that extends planning and simulation capabilities to the PC user.
- AMSOFT Forecast-pc™ is an optional feature for the company's mainframe Demand Forecasting system that extends planning and simulation capabilities to the PC user.
- AMSOFT MPS-pc™ is an optional feature for the Master Scheduling system for PC users.
- AMSOFT QOE-pc™ is an order management tool designed to permit order entry on a PC with transmission to a mainframe via electronic data interchange.
- AMSOFT Buyer Workstation-pc™ allows Purchasing system users to source, expedite, and review receipts for immediate problem resolution.
- AMSOFT IP-pc™ allows Inventory Planning system users to use a PC to access data for simulations.
- AMSOFT Forecast ESP-pc™ provides expert system capabilities on a PC for planners.
- AMSOFT ScreenDesigner™ is a tool for personalized screen modification.
- AMSOFT UserHelp™ provides real-time information about each field on any American Software application screen.
- AMSOFT Sales-pc™ allows users to review selected information on a specific customer, product, product class, time period, or geographic area.
- AMSOFT Promo-pc™ provides marketing or forecasting planners an intelligent workstation where they can create future promotions, monitor promotions in progress, and evaluate the effectiveness of past promotions.

Copyright 1992 by INPUT. Reproduction Prohibited.

- AMSOFT Configurator™ is a specification driven, order entry, planning and manufacturing system that can be used in any manufacture-to-order industry. The product is integrated with MRPII and interfaces with American Software's Forecasting, Customer Order Entry, Manufacturing and Materials Planning, Scheduling, and Shop Floor Control systems.

- AMSOFT Leitstand™ automates the customer's production control center and incorporates the latest techniques in finite scheduling and productions. The product interfaces with the MRP-8 system.

- AMSOFT Integrated Planning Workstation™ is a planning tool that permits workstation access to host-based business information.

- AMSOFT PayLoad™ provides supports traffic managers in preparing economical load manifests of customer shipments and warehouse replenishments. Simulation tools allow loads to be modified as events occur.

Support services provided by American Software in conjunction with its software products include a 24-hour hotline service, on-site implementation assistance, training courses, and documentation materials.

Through its Professional Services Division, American Software provides specialized consulting, custom programming, on-site installation, and extended training services. These services are provided outside of the services included in the licensing of the company's software products and are typically provided under a separate contract based on time and materials used.

Industry Markets

American Software customers typically are medium and large companies or divisions of larger companies. The company has licensed its applications software to approximately 1,050 customers.

End users include manufacturers of building materials, chemicals, consumer goods, electronics, food products, pharmaceuticals, pulp and paper, steel, and textiles; financial institutions; the health care industry; petroleum producers; public utilities; and the transportation industry.

American Software also has joint marketing relationships with other software and hardware vendors including Computer Associates, Metro Mark Integrated Systems (Sterling Software), Intermec, Interactive Images, Syntellect, AHP Software, Deloitte & Touche,

Copyright 1992 by INPUT. Reproduction Prohibited.

Ernst & Young, Electronic Data Systems, Price Waterhouse, Software AG, IBM, and IBM as a Business Partner in the Industry Applications Specialist Program.

Geographic Markets

Approximately 90% of American Software's fiscal 1991 revenue was derived from the U.S. and 10% was derived from international sales.

A three-year source of revenue summary follows:

AMERICAN SOFTWARE, INC.
THREE-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	4/91		4/90		4/89	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
U.S.	$91.9	90%	$76.8	83%	$65.0	88%
International	10.0	10%	16.0	17%	8.5	12%
TOTAL	**$101.9**	**100%**	**$92.8**	**100%**	**$73.5**	**100%**

American Software has regional offices in Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Hartford, Los Angeles, Minneapolis, New York Philadelphia, Pittsburgh, San Francisco, Seattle, Singapore, and Toronto.

International subsidiaries are in Australia, Japan, Thailand, and the U.K.

American Software also has international agents in Belgium, France, Germany, Hong Kong, Indonesia, Italy, Korea, Singapore, Taiwan, and Thailand.

Computer Hardware and Software

American Software has the following computers installed at its headquarters in support of software development and testing:

- 1 IBM 3084Q, OS, MVS
- 2 IBM System/38s
- 1 IBM 9370
- 2 IBM AS/400s

Copyright 1992 by INPUT. Reproduction Prohibited.

Davis R. Blaine SVP
(Secy- Barbara State)

COMPANY HIGHLIGHT

AMERICAN VALUATION CONSULTANTS
2200 East Devon
Des Plaines, IL 60018
(312) 297-6100

John F. Briggs, President
Private company
Total employees: 150
Total revenues, fiscal year end 1/31/78: $2,800,000*

THE COMPANY

- American Valuation Consultants, Inc. (AVC) was incorporated in March 1971 (in Delaware) to provide tax and accounting software packages and valuation services. System clients number over 250 and come from a variety of industries, mostly manufacturing.

- Revenues increased 24.7% from approximately $1.8 million in 1975 to $2.8 million in 1976. During the same period employment grew from 55 to 100. AVC estimates that in 1977 it will reach $4.5 million in revenues while retaining 150 employees. The marketing staff is expected to grow from 7 in 1976 to 12 in 1978.

- In the last two years, AVC has begun to provide professional services and batch processing for software clients in addition to its traditional software packages.

KEY PRODUCTS AND SERVICES

- Thirty-two percent of AVC revenues are derived from its systems software product sales, sixty-five percent from professional services, and three percent from batch processing for software users.

- The company has four basic utility software packages:

 - BIT-FACS (Book, Insurance, Tax-Fixed Asset Control System), with 205 users and producing approximately 26% of AVC revenues, was introduced in 1971. A system with 17 modules, it provides property management, tax accounting, fixed asset control, and depreciation forecasting. It is available for IBM 360/370 mainframes running under DOS or OS as well as non-IBM hardware. It is written in ANS COBOL.

 - PAC-FACS (Programmed Appropriation Commitments-Fixed Asset Control System) with 40 uers and producing approximately 5% of total revenues, was introduced in 1973. It is a system of 6 programs for control of capital budgeting, appropriation, and construction-in-progress reporting. Programmed in ANS COBOL, it is available for IBM 360/370 mainframes under DOS or OS and non-IBM hardware.

*AVC estimate

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

- TAX-FACS (Corporate Income Tax Preparation), with 6 users and approximately 0.52% of revenues, was introduced early this year. Its five programs prepare state and local tax returns (Federal capability is available), develop audit trails, simulate and forecast future tax liabilities, and produce customized tax forms. It runs on IBM 360/370 mainframes under DOS or OS and is written in ANS COBOL.
- LEAS-FACS (LEASe-Financial Accounting Control System), also generating 0.5% of total revenues, was introduced in Spetember 1977. Offering financial accounting and reporting for capital and operating leases (for both leasors and leasees), it was designed to be an add-on to PAC-FACS and BIT-FACS. There are 15 purchasers of this system.

- Professional services include analyses for property inventory, control, valuation, taxation, and accounting. Tangible assets appraised include land, buildings, machinery and equipment. In addition, studies often involve intangible assets such as patents, license agreements, trademarks, franchises, processes, assembled organizations, and good will.

APPLICATIONS AVC software packages have general business, types of applications.

INDUSTRY MARKETS Manufacturing provides the majority of AVC revenues although retailers are becoming a larger industry sector as shown below:

Industry	1975	1977	1979(E)
Manufacturing			
Discrete	35%	40%	30%
Process	45	31	30
Distribution			
Retail	15	20	20
Wholesale	0	0	2
Transportation	3	5	7
Banking and Finance	2	3	5
Utilities	0	1	3
Government			
Federal	0	0	1
State and Local	0	0	1
Medical and Hospital	0	0	1

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

GEOGRAPHIC MARKETS Although the middle regions of the U.S. have traditionally been the major sources of AVC's revenues, the company is increasingly targeting the Northeast and Pacific states, as shown below:

AREA	1975	1977	1979(E)
New England	2	5	7
Northeast	10	20	25
Southeast	3	5	5
North Central	50	35	22
Midwest	20	15	16
Mountain	5	5	5
Pacific Coast	10	15	20

COMPUTER HARDWARE AND SOFTWARE AVC uses an HP3000 in providing its services and its software development.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

INPUT®

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

April 1996

America Online, Inc.

Chairman & CEO: Stephen M. Case
President & COO: William J. Razzouk
8619 Westwood Center Drive
Vienna, VA 22182-2285
Phone: (703) 448-8700
Fax: (703) 883-1509
Internet: http://www.aol.com

Status:	Public
Employees:	4,000 (2/96)
Revenue:	$394,290,000
Fiscal Year End:	6/30/95

Key Points

- America Online, Inc. is the fastest growing provider of on-line services to consumers. The company offers subscribers a wide variety of services, including electronic mail; news, weather, sports and stock quote information; conferencing capabilities; access to software; on-line classes; home shopping; and access to the services of the Internet.
- In January 1996, America Online announced the appointment of William J. Razzouk to the position of president and chief operating officer, reporting to chairman and chief executive officer Stephen Case.
- For the quarter ending December 31, 1995, America Online's revenues rose 235% over the same period in 1994, primarily due to a 191% increase in the number of subscribers. In February 1996, the company announced that the number of subscribers topped five million, representing a ten-fold increase in just two years.
- In the summer of 1996, America Online will offer Microsoft's Internet Explorer as its default integrated browser; members will be able to download Netscape Navigator as an alternate integrated browser.

© INPUT 1996 Reproduction prohibited

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

- America Online has made acquisitions over the past year that expand the company's capabilities in the areas of multimedia production tools, enhanced graphics and browsing capabilities for the World Wide Web, and a branded Internet service.

Company Description

America Online offers a range of on-line network and electronic information services, including electronic mail, conferencing, software, computing support, interactive magazines and newspapers and on-line classes.

- The company was founded in 1985 as Quantum Computer Services, Inc.

- In October 1991, the company changed its name to America Online to more accurately reflect the nature of its operations.

- In March 1992, America Online completed an initial public offering of two million shares of common stock, generating net proceeds of approximately $10.3 million. In December 1993, the company successfully completed a second public offering of one million shares of common stock, which generated approximately $62 million in cash.

- In October 1995, America Online approved a 2-for-1 stock split payable on November 28, 1995.

America Online currently has more than five million subscribers in the U.S. and Canada. The number of subscribers has increased significantly over the past year as indicated in the table below:

America Online, Inc.
Subscribers at Quarter-End

Item	3/96	12/95	9/95	6/95	3/95
Number of subscribers	+5,000,000	4,500,000	3,714,000	3,000,000	+2,000,000

Operations/ Structure

America Online is organized into four divisions, each with a clear focus, that establish a central and defining leadership position for America Online in the worldwide market for interactive services.

- AOL Services Company, headed by Ted Leonsis, is the focal point for building interactive environments.

 - AOL Services oversees the acquisition or generation of the wide variety of content available on AOL, is responsible for member support, initiating the development of on-line programming via its joint ventures, product management, interface design and production, marketing, CD ROM, and the development of new revenue streams via interactive marketing programs and transactional services.

 - This unit supports AOL Greenhouse, a program to fund and otherwise support the creation of on-line interactive content by entrepreneurs, and GNN, America Online's standalone Internet service.

© INPUT 1996 Reproduction prohibited.

- AOL New Enterprises, headed by David C. Cole, is the business-to-business component of AOL Services. This group provides tailored, private on-line services for a company's networking communications, distribution, and promotional needs.

- AOL Technologies, headed by Michael M. Connors, is responsible for delivering research, development, network/data center operations, and member support to the other America Online divisions, technology licensees, and joint venture partners. This group is also responsible for support functions, including technical support, billing, and sales.

- AOL International, headed by John L. Davies, is responsible for marketing America Online's products and services to international markets, primarily in Japan, Europe, and Canada.

Ventures

In March 1996, America Online and New Line Television announced THE HUB—a venture that borrows from the concept of cable and broadcast TV with 25 "programs" on 8 "channels" to provide content in the areas of entertainment, arts and culture, relationships, the latest (and strangest), and news.

In April 1995, America Online entered into a joint venture with Bertelsmann, AG, one of the world's largest media companies, to offer interactive services in Europe.

- The joint venture is equally owned by the two companies. Bertelsmann has agreed to contribute up to $100 million to fund the launch of the service, will provide access to its book and music club membership base of more than 30 million members, and will offer its publishing content to the joint venture on a most-favored-customer basis..

- America Online will contribute interactive technology and management expertise, proprietary software licenses and development services, staff training, and technical support to develop, test and launch the services in Europe.

- The first service, AOL Germany, was launched in Germany in November 1995. France and the U.K. are expected to follow in the first half of 1996.

- As part of the alliance, Bertelsmann acquired a minority equity stake (5%) in America Online, representing an investment of approximately $50 million.

In October 1995, America Online and Capital Cities/ABC announced a joint venture to develop an interactive fashion and lifestyle channel on America Online.

2Market, Inc., a company cofounded and majority-owned by America Online, is an interactive shopping service using on-line and CD ROM communications.

- America Online currently owns 69% of the planned joint venture with Apple Computer and Medior, Inc.

- 2Market offers thousands of products from more than two dozen catalogs.

America Online (as well as a group of other investors) has a minority interest in Preview Media, Inc., a leading seller of travel via television. The alliance will allow Preview Media to create new platforms for travel sales within emerging distribution channels (including commercial on-line services and the Internet), broadening the audience for direct travel transactions.

© INPUT 1996. Reproduction prohibited.

Company Strategy

America Online's strategy is to lead the development of a new interactive medium that potentially will to change the way people obtain information, communicate with one another, buy products and services, and learn.

Through the combination of its growing membership base, enhanced look and feel, and ability to program its content to appeal to users, America Online believes it is uniquely positioned to exploit the evolving mass medium for interactive services.

In implementing its strategy, America Online pursues the following initiatives:

- *Invest in growth of its existing service*—America Online plans to continue to invest in the growth of its existing on-line services. It believes it can attract and retain new members by expanding the range of content and services it offers, continuing to improve the multimedia context of its service and building a sense of community on-line. At the same time, by offering access to a large, growing, and demographically attractive audience, together with software tools and services to develop content and programming for that audience, America Online believes it will continue to appeal to content and service providers.

- *Exploit new business opportunities*—America Online intends to leverage its technology, management skills and content packaging skills to identify and exploit new business opportunities, such as the consumerization of the Internet, electronic commerce and entry into international markets.

- *Provide a range of interactive services*—Through acquisitions and internal development, America Online has assembled content development, distribution capabilities, access software and its own communications network to become a full-service, vertically integrated provider of interactive services.

- *Maintain technological flexibility*—America Online recognizes the need to provide its services over a diverse set of platforms. Its software works on various personal computers and operating systems (including Macintosh, Windows 3.xx and Windows 95) and supports a variety of different media, including on-line services, the Internet and CD-ROM. The company intends to adapt its products and services as new technologies become available in the future.

American Online currently generates revenue largely from membership fees, but the company believes that it will receive revenue in the future from other sources as well, including advertising fees, commissions on merchandise sales to consumers and revenues from the sale of production and network services to enterprises.

Financials

America Online's total fiscal 1995 revenue reached $394.3 million, a 241% increase over fiscal 1994 revenue of $115.7 million.

- Net losses of $33.6 million for fiscal 1995 included charges of $50.3 million for acquired research and development (related to the acquisitions of BookLink and NaviSoft during 1995) and merger expenses of $2.2 million associated with the acquisitions of Redgate, Medior, Inc. and Wide Area Information Servers, Inc.

- In the five-year summary that follows, financials have been restated to reflect the pooling-of-interests acquisition of Medior and Wide Area Information Servers during fiscal 1995.

© INPUT 1996 Reproduction prohibited.

America Online, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

	Fiscal Year				
Item	6/95	6/94	6/93	6/92	6/91
Net service revenue	$358.5	$101.0	$38.5	$26.2	$19.5
Other revenue	35.8	14.7	13.5	12.5	10.6
Total	$394.3	$115.7	$52.0	$38.7	$30.1
• Percent change from previous year	241%	123%	34%	24%	N/A
Income (loss) before taxes and extraordinary items	$(18.5) (a)	$6.4	$2.3	N/A	N/A
• Percent change from previous year	(389%)	178%	N/A	N/A	N/A
Net (loss) income	$(33.6)	$2.6	$1.5	$3.8	$1.8
• Percent change from previous year	(b) *	73%	(61%)	111%	N/A
Earnings (loss) per share	$(0.99)	$0.07	$0.05	$0.17	$0.09
• Percent change from previous year	*	40%	(71%)	89%	N/A

(a) Includes charges of $50.3 million for acquired research and development associated with the acquisition of BookLink and NaviSoft.

(b) Includes merger expenses of $2.2 million.

On-line services revenue increased 255% over fiscal 1994 primarily due to a 289% increase in revenue from IBM-compatible subscribers (with a 273% increase in subscribers) and a 196% increase in revenue from Macintosh subscribers (with a 143% increase in subscribers).

The average monthly on-line service revenue per subscriber increased from $15.00 in fiscal 1994 to $17.10 in fiscal 1995.

Other revenue, consisting primarily of new media and interactive marketing services, data network services, multimedia and CD ROM product services, and development and licensing fees, increased 150% due to data network revenue and multimedia and CD ROM product service revenues from companies acquired during fiscal 1995.

Interim Results

Revenue for the six months ending December 31, 1995 reached nearly $447 million, a 235% increase over $133.3 million for the same period in 1994.

- Net income for the period was $328,000 and includes charges for amortization of goodwill of $3.4 million and expenses for acquired research and development of $17 million. For the prior period, net losses of $37.2 million included $42.8 million of charges for acquired research and development and merger expenses of $1.7 million.

On-line services revenue increased 248% due to a 191% increase in the number of subscribers.

© INPUT 1996 Reproduction prohibited.

- The average monthly on-line service revenue per subscriber for the six months ending December 31, 1995 was $17.85, up from $16.04 in the six months ending December 31, 1994.

Market Financials

Virtually 100% of America Online's fiscal 1995 revenue was derived from consumers in the U.S. and Canada.

Through its venture with Bertelsmann, the company has launched interactive services in Germany, with plans to expand to France and the U.K. during 1996.

The company intends to expand its services to include Japan through a joint venture with one or more Japanese partners.

Geographic Markets

As previously stated, 100% of America Online's revenue is derived from the U.S. and Canada.

America Online has offices in Vienna (VA), Boston (MA), Jacksonville and Vero Beach (FL), Tucson (AZ) and Hillsborough (CA).

Acquisitions

In February 1996, America Online acquired Johnson-Grace Company for approximately 1.6 million shares of America Online common stock. The acquisition will be accounted for as a pooling of interests.

- Headquartered in Newport Beach (CA) with approximately 70 employees, privately held Johnson-Grace develops data compression technologies. These technologies, known as ART, allow publishers to create more engaging interactive content that includes graphics, streaming audio and slide shows on the Web and commercial services.
- America Online plans to broadly license ART to strategic partners and content developers across the Internet. Johnson-Grace SDK (Software Developers Kit) will also be available to software application companies that wish to include support for the ART format in their applications.
- Johnson-Grace will operate as a subsidiary of America Online.

In September 1995, America Online acquired Ubique, Ltd. for approximately $14.6 million in cash and stock.

- Ubique, Ltd. is an Israeli company that offers real-time interaction and joint navigation for the Internet. Ubique developed Virtual Places, a client/server software architecture that humanizes the Internet's World Wide Web by allowing people to virtually meet and interact.
- The acquisition is expected to strengthen America Online's Internet offerings by enhancing and expanding its existing live on-line interactive communication for both its consumer on-line service and its new Internet brand service (GNN, or Global Network Navigator).

In June 1995, America Online acquired Global Network Navigator (GNN), a subsidiary of O'Reilly & Associates, Inc., for approximately $11 million in cash and stock.

- GNN, the first commercial Web publishing site, is one of the most highly trafficked sites on the Web. America Online's new Internet brand combines the content and context of GNN with the InternetWorks Web browser and software suite, Web directories, and search tools.
- America Online's goal is to build a mass market for interactive services. To do so,

© INPUT 1996. Reproduction prohibited.

the company must reach out to 93% of the households that don't subscribe to any on-line service. The GNN brand expands America Online's scope and broadens its appeal.

- In addition to building original content and programming for America Online's new Internet brand, GNN will continue to provide a range of advertising-supported free services and is available to anyone who has a Web browser.

- GNN operates as a wholly owned subsidiary of America Online.

In June 1995, America Online also announced it had acquired the WebCrawler search tool and Internet index.

In May 1995, America Online acquired Wide Area Information Servers, Inc. (WAIS) of San Francisco (CA) for approximately 400,000 shares of America Online common stock. The acquisition was accounted for as a pooling of interests. WAIS developed and marketed the WAISserver and WAIS Production Services, which create custom on-line services for publishers.

In May 1995, America Online acquired Medior, Inc. of San Mateo (CA) for approximately 825,000 shares of America Online common stock. The acquisition was accounted for as a pooling of interests.

- Medior provides multimedia production tools and services.

- With the acquisition, America Online will accelerate its role in providing content partners with enhanced multimedia publishing capabilities.

In February 1995, America Online acquired Advanced Network & Services, Inc. (ANS), creator of the Internet backbone, for $35 million in cash and America Online common stock.

- The acquisition included ANS' wholly owned subsidiary, ANS CO+RE Systems, Inc., which provides virtual private data network services, Internet access, network security and related services to major business.

- The acquisition is expected to strengthen America Online's networking strategy to rapidly deploy network capacity from multiple sources.

- ANS now operates as a wholly owned subsidiary of America Online.

In December 1994, America Online acquired two Internet companies that form the nucleus of America Online's Internet Services Company.

- In December 1994, America Online acquired BookLink Technologies, Inc. from CMG Information Services for 710,000 shares of America Online common stock. BookLink developed the InternetWorks interface for Internet viewing/browsing.

- In November 1994, America Online acquired NaviSoft, Inc. for 130,000 shares of America Online common stock. NaviSoft has developed a collection of software products that provide companies with turnkey Internet solutions. These products have been spun off into America Online's GNN service.

In August 1994, America Online acquired Redgate Communications Corporation of Vero Beach (FL) for approximately 447,000 shares of America Online common stock. The acquisition was accounted for as a pooling of interests.

© INPUT 1996 Reproduction prohibited.

- Redgate—a new media and interactive marketing services company—also manages multimedia content databases and delivers its content via custom publications, CD ROM, cable, broadband, demand fax, private satellite networks and digital shopping clubs.

- Redgate's partners and customers include Apple Computer, IBM, EDS, BellSouth, U S WEST, Fidelity, Sun Microsystems, Intel, Olivetti, Racal Datacom, Knight-Ridder, Novell, Xerox, Microsoft, Motorola, NYNEX, Prudential, Pacific Bell, Hewlett-Packard and Fairway Technologies.

- Redgate now operates as a wholly owned subsidiary of America Online.

Employees

As of June 30, 1995, America Online had 2,481 employees, segmented as follows:

Marketing	60
Operations	391
Software and content development	624
Customer support	1,283
Corporate and finance	123
	2,481

The company currently has approximately 4,000 employees.

Key Products and Services

America Online offers a range of services, including electronic mail, conferencing, news, sports, weather, stock quotes, software, computing support, on-line classes, and Internet access, as follows.

- A key feature of America Online's services is the ease with which subscribers with related interests can communicate in real-time conferences, through electronic mail and on bulletin boards. These interactive communications facilities allow people to share information or ideas, exchange advice and socialize.

- America Online promotes real-time on-line communication by scheduling conferences or discussions on specific topics. Electronic mail services allow subscribers to send messages to other members' private electronic mailboxes or to nonsubscribers via fax, U.S. mail or an international electronic mail gateway. Public bulletin boards allow subscribers to share information and opinions on subjects of general or specialized interest.

- America Online supports a variety of software platforms, hardware devices and conduits for delivery of its services. Software platforms include Windows, DOS and Macintosh. The service is available on personal digital assistants (PDAs). In addition, the company supports TCP/IP and is participating in early cable trials using cable as the conduit into PCs and has announced future support of ISDN and wireless.

The range of services offered by America Online is summarized in Exhibit A and includes the following fourteen major departments:

- *Today's News*—Up-to-the-minute news, business news, sports and entertainment news from more than 20 national and international wire services is provided, including news from Reuters, UPI and Business Wire. Members can get updated local weather information and download national weather maps.

- *Personal Finance*—With StockLink, members can keep track of stock and option prices listed on various exchanges such as NYSE and NASDAQ, and maintain an

© INPUT 1996 Reproduction prohibited.

updated portfolio. Other services include Morningstar, Vanguard, Investor's Network, PC Financial Network, and Tax Forum.

- *Entertainment*—News and reviews on television shows, ABC Online, MTV Online and Hollywood Online are featured. Members can access news about recording artists and download music in America Online's MusicSpace. This department also includes book and movie reviews, horoscopes, trivia, soap opera summaries, Online Gaming Forums, LaPub (a "virtual pub") and Center Stage, a virtual Theater District where members can chat real-time with the stars.

- *Travel*—Subscribers can plan travel using information found in The Traveler's Corner, hosted by Weissman's Travel Reports; book airlines, hotels and rental cars through easySABRE; browse through travel information with ExpressNet; and share travel experiences and adventures in The Travel Forum. Information is also provided about golf resorts, bed and breakfasts throughout the country, and travel advisories.

- *MarketPlace*—This department offers a range of shopping services and brand name products. Members can make purchases through the Global Plaza, which includes products ranging from car accessories to jewelry. They can also order groceries and pharmacy items and have them delivered to their home. America Online provides members with on-line catalog shopping through 2Market, which features goods and services from leading catalogs and retailers. Consumer Reports on-line is also available to guide the on-line shopper.

- *Computing*—Subscribers can access close to 200,000 public domain or "shareware" software programs that can be downloaded for personal use. They can also get assistance on computing questions from more than 250 PC and Mac vendors who maintain technical support areas on the service, including software libraries, message boards, product information and news about their company. Developers are available to answer questions through conferences or bulletin boards.

- *People Connection*—The service features a list of member-created "real-time" chat rooms on a variety of topics. Other features include Center Stage, a "virtual Theater district"; The Gallery, which allows members to post their own images; the Games Parlor, which includes a schedule of on-line member games; and a Games and Entertainment newsletter.

- *The Newsstand*—More than 60 magazines and newspapers on a variety of special-interest topics are provided, ranging from *Car & Driver* to *Windows Magazine*. Other publications include: *Chicago Online, San Jose Mercury Center, @Times* (offered through *The New York Times*), *TIME Online, OMNI Online, COMPUTE, Disney Adventures, Flying Magazine, Elle, Business Week, Spin* and *Seventeen*.

- *Clubs & Interest*—America Online's service provides a collection of more than 50 special interest clubs and affinity groups, including The Better Health & Medical Forum, The Career Center, The Cooking Club, Environmental Forum, The Grandstand, Wine & Dine Online, AARP and others. Message boards and chat rooms are located in the forums so members can communicate with others who have similar interests.

- *Education*—On-line members can participate in on-line classes, visit the Library of Congress and the Smithsonian, and read *National Geographic*. This area

© INPUT 1996. Reproduction prohibited.

also offers The Parent's Information Network, The Teacher's Information Network and other resources of information, including a Career Center.

- *Reference Desk*—Members can search more than 60 information databases ranging from the Bible to the Internet. The Reference Desk includes Miriam Webster's dictionary and Compton's encyclopedia.

- *Kids Only*—America Online provides news, sports, encyclopedia searches, computer games, computer art information, various clubs, reviews on TV books and movies, and talk with other kids.

- *Sports*—Sports information is provided in the areas of sports news, current events, fantasy sports leagues, DataTimes Sports Reports, college teams, and NFL football.

- *The Internet Connection*—America Online created the Internet Center to make the Internet's resources more accessible and easy to use for America Online subscribers.

 - The Internet Center features graphical icons to provide simple navigation through the complexities of the Internet.

 - Members can currently browse the World Wide Web, send and receive unlimited amounts of mail through the Internet, participate in all available Usenet newsgroups, search the WAIS and Gopher databases, learn about upcoming features (Telenet & FTP) and participate in discussions about netiquette and other topics in the message board area.

In addition to the content currently available on its on-line service, America Online continues to add informative content through its strategic alliances with information providers as well as through joint ventures with major media companies.

To further stimulate the development of new content, America Online has created the America Online Greenhouse to fund the development of new programming by entrepreneurs. To date, America Online has funded the development of approximately 15 new on-line content developers.

Pricing is based on monthly subscriptions, which are automatically renewed each month; fees are electronically charged to credit cards or debited from checking accounts until a subscriber requests cancellation.

- During fiscal 1995, the average monthly net service revenue per paying subscriber was approximately $17.10, up from $15.00 in fiscal 1994.

- The standard monthly membership fee is $9.95, which includes five hours of access per month. The hourly fee for usage beyond that included with membership is $2.95.

Internet Access and Service

America Online's goal is to consumerize the Internet by providing simple access to and use of the Internet for members of the America Online service and for users seeking direct access to the Internet.

America Online introduced its Web browser in May 1995, which provides integrated World Wide Web access within the America Online service, and guides members to Web sites based on areas of consumer interest.

America Online has incorporated advanced high-speed compression technology into the browser to improve Web access speed and graphic display performance.

© INPUT 1996 Reproduction prohibited.

America Online's GNN service, introduced in October 1995, is aimed at the segment of on-line consumers who seek a full-featured Internet-only solution and publishers interested in enhancing their presence on the Web.

- GNN incorporates technologies acquired during the past year, including the ANS network infrastructure, BookLink browser, NaviSoft personal publishing tools, GNN user interface and WebCrawler search engine.

- GNN has local dial availability in more than 600 cities.

- Pricing for GNN provides consumers with free, unlimited usage for the first month. Thereafter, the monthly fee is $14.95 for 20 hours of daytime or evening use, with additional hours at $1.95.

Multimedia and CD ROM

Medior, acquired in May 1995, provides multimedia production tools and services. Medior's production studio handles all aspects of interactive content development and design, including research and development, engineering, quality assurance, design and implementation of screen interfaces, 3-D texturing and video, and production services.

2Market offers a hybrid CD ROM and on-line-based interactive shopping service that features goods and services from numerous catalogs and retailers, as well as a one-step connection to the America Online service.

America Online plans to develop additional hybrid CD ROM/on-line content offerings that bring together multimedia presentation and on-line connectivity.

Access and Delivery of Services

America Online has a variety of networking initiatives to redefine the ways in which members access its services.

- The company has contracted with third-party data networks, predominantly Sprint, so that members in cities throughout the U.S. and Canada can dial one of approximately 750 local access numbers to connect to its services.

- The company has launched AOLnet, which is based on a portfolio approach whereby network services are provided by a number of different entities, including Sprint, ANS (acquired by America Online in 1995) and BBN. AOLnet provides members with more reliable, higher speed access and should be easier to expand and upgrade. The ANS backbone network carries daily traffic of more than three billion packets.

- In November 1995, America Online announced AOLGLOBALnet, an international access network for members who travel globally and want to connect to America Online. AOLGLOBALnet is available in more than 130 cities in nearly 50 countries.

- In addition, members in rural areas or members who travel frequently in the U.S. can access America Online through an 800 number.

America Online is investing in developing alternative technologies to deliver its services.

- The company has agreements with several manufacturers of PDAs, including Sony, Motorola, Tandy and Casio, to bundle a palmtop edition of America Online's client software with the PDAs of these manufacturers.

© INPUT 1996 Reproduction prohibited.

- America Online is currently participating with Viacom, Comcast, Rogers Cablesystems, TCI Communications, and Cablevision Systems in cable trials to deliver its consumer on-line services to personal computers via cable networks and has announced that it will support the cable modem platforms of Intel, General Instruments, Scientific Atlanta and LAN City.

- In the paging market, America Online has agreements with AT&T Wireless Services and MobileMedia to provide their paging customers who subscribe to America Online with mobile access to certain America Online services.

- America Online has an agreement with Pacific Bell to deliver America Online's service over ISDN connections in Pacific Bell's service area.

Enterprise Tools and Solutions

America Online offers authoring and publishing tools and services for creating World Wide Web content and developing commercial applications to exploit the potential of the Internet.

NaviSoft, acquired by America Online in November 1994, has developed a collection of client/server products, including Web authoring software (NaviPress) and a commercial Web server (NaviServer). The products are available for Windows, Macintosh and UNIX platforms. America Online will also implement and maintain Web sites for third parties through its NaviService service.

Through ANS, America Online designs, develops and operates high-performance wide-area networks for business, research, education, and government organizations. Through this network, ANS delivers Internet, wide-area network, and virtual private data network services to enterprises.

Customer Services

America Online provides on-line support and telephone support services.

Once a customer subscribes, America Online implements retention marketing programs designed to increase customer loyalty and to maximize customer subscription life. These programs include regularly scheduled on-line events and conferences, on-line promotions of new services and additions of new software programs.

Marketing and Sales

The overall goal of America Online's marketing programs is to increase the visibility of the America Online brand and to make it easy for consumers to try its services.

- America Online attracts new subscribers through independent direct marketing programs, such as direct mail, disk inserts and onserts in publications, advertising and a variety of comarketing efforts.

- The company has entered into comarketing agreements with numerous personal computer hardware, software, and peripheral production companies. These companies bundle America Online software with their products.

- America Online has also entered into comarketing agreements with certain of its media partners and with affinity groups and associations to market directly to and cater to the needs of specific audiences.

Alliances

America Online has allied with more than 300 leading hardware and software vendors to develop new technologies, jointly market

© INPUT 1996 Reproduction prohibited.

products and provide an efficient on-line source of product support to their customers.

- More than 30 personal computer, software, and modem companies, including IBM, Tandy, Lotus and Microsoft, bundle America Online products with their products.

- More than 300 companies use America Online to provide ongoing technical support for their customers.

America Online has a range of content/marketing relationships with media companies that provide content to America Online's services.

Recent alliances include the following:

- In March 1996, America Online announced an alliance with Netscape Communications whereby America Online will license Netscape Navigator client software technology for use in all of its services.

- In March 1996, America Online announced a technology and strategic partnership with Microsoft and agreed to make Microsoft Internet Explorer the standard, built-in Web browser for its customers. Microsoft will give Windows 95 access to the America Online service via a folder on the Windows 95 desktop.

- In March 1996, America Online announced a licensing and development agreement with Sun Microsystems whereby America Online will license Sun's Java technologies, including the Java programming language.

- In March 1996, America Online and AT&T announced that customers of AT&T WorldNet Service will be able to access and sign up to America Online.

- In March 1996, America Online and Apple Computer formed a strategic relationship focused on the distribution of America Online to Apple customers and development of interactive programming and content by Apple. Apple is discontinuing its eWorld on-line service and both companies have agreed to provide easy access and incentive for eWorld users to begin using America Online. America Online has renewed its commitment for development and innovation on the Macintosh platform with new client software and World Wide Web integration.

- In November 1995, Bertelsmann AG and America Online formed an alliance with Deutsche Telekom whereby the parties will swap equity positions in their respective European on-line ventures. In addition, Deutsche Telekom is expected to make a minority investment in America Online through Bertelsmann's agreement to transfer its option to purchase stock of America Online to Deutsche Telekom.

- In November 1995, America Online and Intuit announced a strategic agreement to jointly provide on-line electronic banking to America Online members.

- In September 1995, America Online and Compaq signed a promotion and distribution agreement that includes America Online as the featured consumer on-line services provider preinstalled on Compaq's newest Presario personal computers targeted at the consumer market.

- In September 1995, America OnLine's NaviSoft unit and Macromedia announced they will unite Web site development tools and interactive multimedia tools to bring enhanced content to the World Wide Web.

© INPUT 1996 Reproduction prohibited.

- In July 1995, America Online announced a partnership with Time Warner Cable to conduct a 500-home broadband trial in Elmira (NY), delivering on-line services over a broadband network.

Competition

Major direct competitors in on-line services include include Prodigy (a joint venture of Sears and IBM), CompuServe, AT&T WorldNet, Microsoft Network, and Internet MCI (a service of MCI).

Internet services competitors include NETCOM On-Line Communications Services, Bolt, Beranek & Newman (BBN), Performance Systems International and UUNET Technologies. Internet client/server software competitors include Netscape Communications and Spyglass.

INPUT Assessment

As interactive on-line services have shifted to graphical user interfaces, traditional competitors like CompuServe and Prodigy have struggled with the shift. Consumer migration to Windows has created a tremendous opportunity for America Online to gain market share.

America Online has also staked out a market position in offering services for access to the Internet. It is also planning to extend its platform to support new conduits such as wireless and cable. These new conduits will extend the delivery of America Online outside the traditional public data network environment.

The proliferation of access devices and conduits for on-line services creates uncertainty for market participants and prospective market entrants. America Online is well positioned as a strategic partner to speed market entrance for media companies seeking to leverage their content.

Powerful companies such as Microsoft and AT&T are entering the on-line services market and the challenge for America Online will be to leverage its current subscriber growth and alliances with the media companies.

America Online must add system capacity to assure that its subscribers can readily access the network.

© INPUT 1996 Reproduction prohibited.

April 1995

America Online, Inc.

Chairman: James V. Kimsey
President & CEO: Stephen M. Case
8619 Westwood Center Drive
Vienna, VA 22182-2285
Phone: (703) 448-8700
Fax: (703) 883-1509

Status:	Public
Employees:	1,400 (4/95)
Revenue:	$ 104,410,000
Fiscal Year End:	6/30/94

Key Points

- America Online, Inc. is the fastest growing provider of on-line services to consumers. The company offers subscribers a wide variety of services, including electronic mail; news, weather, sports and stock quote information; conferencing capabilities; access to software; on-line classes; home shopping; as well as access to the services of the Internet.
- For the quarter ending December 31, 1994, America Online's revenues rose 194% over the same period in 1993. In February 1995, the company announced that the number of subscribers had nearly tripled over the past year, topping the two million mark.
- In early 1995, America Online completed the acquisitions of Internet software developers, BookLink Technologies and NaviSoft, and Internet backbone developer, Advanced Network & Services.
- In February 1995, America Online announced the formation of WebSoft, Inc., a new venture designed to leverage the Internet assets of America Online and others to create open standards for companies who want to build a presence on the Internet.
- In March 1995, America Online announced an alliance with Bertelsmann, AG to offer interactive services in Western and Eastern Europe.

© INPUT 1995 Reproduction prohibited

- America Online has recently made a strategic investment in 2Market, Inc., an interactive shopping service formed last October using on-line CD ROM communications.

- In January 1995, America Online signed agreements with AT&T Wireless Services and MobileMedia to provide personalized paging services.

- The company has also signed strategic partnerships with American Express, Business Week Online and NTN Communications.

- In January 1994, America Online announced it had joined with Shoppers Express, the nation's largest shop-at-home company, to provide interactive home grocery and pharmacy delivery services to its subscribers.

- In March 1994, America Online announced its expansion of Internet support through the launch of USENET Newsgroups and a preview of WAIS and Gopher Databases, making it the first national on-line service to offer consumers access to Internet content through an easy-to-use graphical interface.

Company Description

America Online offers a range of on-line network and electronic information services, including electronic mail, conferencing, software, computing support, interactive magazines and newspapers and on-line classes.

- The company was founded in 1985 as Quantum Computer Services, Inc.

- In October 1991, the company changed its name to America Online to more accurately reflect the nature of its operations.

- In March 1992, America Online completed an initial public offering of two million shares of common stock, generating net proceeds of approximately $10.3 million. In December 1993, the company successfully completed a second public offering of one million shares of common stock which generated approximately $62 million in cash.

America Online currently has more than two million subscribers in the U.S. and Canada. The number of subscribers has increased significantly over the past year as indicated in the table below:

America Online, Inc.
Subscribers at Quarter-End

Item	3/95	12/94	9/94	6/94	3/94
Number of subscribers	+2,000,000	1,578,000	1,158,000	903,000	+700,000

Operations/ Structure

Consistent with America Online's efforts to broaden its product offerings and pursue new strategic initiatives, in September 1994, the company announced the formation of four operating companies—AOL Services Company, Internet Services Company, AOL International and AOL Technologies, all reporting to Steve Case, President and CEO. These divisions, each with a clear focus, establish a central and defining leadership position for America Online in the worldwide market for interactive services.

© INPUT 1995. Reproduction prohibited.

- AOL Services Company, headed by Ted Leonsis, is responsible for America Online's electronic information services.

- Internet Services Company, headed by David C. Cole, will focus on creating Internet-based on-line interactive services. Two newly acquired companies—BookLink Technologies and NaviSoft—form the nucleus of Internet Services Company.

- AOL International is responsible for marketing America Online's products and services to international markets, primarily focused in Japan and Europe.

- AOL Technologies represents the company's efforts to acquire, develop, deploy and maintain a scalable on-line system architecture based on open systems technologies and integrate it with both the existing data telecommunications network used by the company and the new TCP/IP-based AOLnet network.

Ventures

In February 1995, America Online announced the formation of Websoft, Inc., a new venture designed to leverage the Internet assets of America Online to create open standards for companies who want to build a presence on the Internet.

- The company intends to align with telecommunications and publishing companies to cross-license technologies and share ownership in the new venture.

- WebSoft is designed to bring together a variety of technology assets, both from within and outside of America Online. Theses technologies are intended to deliver capabilities in client/server, authoring and infrastructure areas. WebSoft participants could range from software vendors, information providers and media companies, to businesses that are integrating their operations onto the Internet.

2Market, Inc. is an interactive shopping service formed last October using on-line and CD ROM communications.

- America Online currently owned 69% of the planned joint venture with Apple Computer and Medior, Inc.

- 2Market offers thousands of products from more than two dozen separate catalogues.

In March 1995, America Online announced a memorandum of understanding with Bertelsmann. AG, one of the world's largest media companies, to offer interactive services in Western and Eastern Europe.

- The two companies will form a joint venture with each owning 50%. Bertelsmann will contribute more than $100 million to fund the launch of the service.

- Bertelsmann will also bring access to its publishing content and book and music club customer base (currently over 30 million worldwide).

- America Online will bring to the venture its expertise in developing, managing and executing interactive services, its multimedia capabilities, access to U.S. content and alliances with computing and media companies worldwide.

- The first services are expected to launch later this year in Germany, France and the U.K.

- As part of the alliance, Bertelsmann will acquire a minority equity stake (5%) in America Online representing an investment of approximately $50 million.

America Online (as well as a group of other investors) has a minority interest in Preview Media, Inc., a leading seller of travel via television. The alliance will allow Preview Media to create new platforms for travel sales within emerging distribution channels (including commercial on-line

© INPUT 1995 Reproduction prohibited.

services and the Internet), broadening the audience for direct travel transactions.

Company Strategy

America Online's goal is to capitalize on the growing demand for on-line services and gain market share by aggressively seeking to build its subscriber base.

- The company believes that by continuing to expand its subscriber base, its services will be more active and stimulating to users and will be more attractive to third-party content providers and distributors.

- In addition, America Online believes that expansion of its subscriber base will create ancillary revenue, such as transaction fees from the sale of merchandise and fees from interactive advertising.

To achieve its objectives, America Online has implemented the following strategies:

- *Focus on market segmentation*—America Online views the consumer market as a series of specific market segments, as opposed to a homogeneous mass market. The company seeks to customize its service offerings to meet the needs of specific markets.

- *Establish strategic alliances*—America Online has focused on forming strategic alliances in order to leverage its opportunities for the attraction of new subscribers and accelerate the creation of new content. America Online has entered into comarketing agreements with more than 40 personal computer hardware, software and modem companies. America Online has also entered into agreements with a number of associations, magazines and other organizations to cater to the needs of specific groups. Relationships with media, cable and TV broadcast companies have also been established to appeal to local or other special interest audiences.

- *Encourage trials of on-line services*—To attract new subscribers, America Online provides its custom communications software free of charge and also provides free usage time to enable subscribers to sample the services. The company has found that a majority of the people who sample the services on a free trial basis become paying members.

- *Simplified pricing*—During 1993, America Online simplified its pricing structure by increasing its monthly based rate from $7.95 to $9.95 and increasing the number of hours of connect time included in the base rate from two to five, which America Online believes encourages usage, provides increased value to subscribers and has the potential of increasing subscriber retention rates.

- *Develop advanced technology*—American Online has begun the transition from graphical user interfaces to multimedia interfaces that use photographs, audio and video and is also testing high-speed ISDN connections. For subscribers with direct Internet connections, America Online has created a TCP/IP version of its software to allow high-speed connections with America Online.

- *Emphasize interactivity*—American Online focuses on maximizing the interactive nature of its offerings by providing services which encourage subscribers to participate in electronic communities in areas where they have common interests. The company believes these electronic communities result in extended subscription life and help secure America Online's competitive position.

- *Strategic acquisitions*—America Online plans to expand its customer base, improve the functionality of its services and create new revenue sources from its customer base by acquiring technologies, products or businesses complimentary to America Online's business.

- *Develop international markets*—America Online intends to pursue a global initiative, with an initial focus on Japan and Europe.

© INPUT 1995 Reproduction prohibited.

The merger with Redgate is expected to strengthen America Online's franchise in interactive services and to create new opportunities by accelerating the company's entry into the multimedia services business.

- Redgate will aid America Online in its transition from a graphical user interface to a multimedia user interface. The merger is also expected to accelerate America Online's entry into electronic shopping, interactive advertising and transactional marketing, as well as broadband services and cable, enabling America Online to create new revenue streams.

- Redgate will expand multimedia publishing options through America Online's on-line services, alternate media channels for distribution, including CD ROM and other media applications. It also provides America Online with content for its on-line service that is owned or made available to Redgate.

In early 1995, America Online also announced that the cornerstone of the company's strategy in 1995 is to improve the quality of everything it does and to:

- Focus not only on adding new members, but on maintaining a consistent high level of satisfaction for existing members

- Continue to add innovative content

- Expand Internet offerings to include the World Wide Web

- Leverage new multimedia technologies

- Increase network access speeds

Financials

America Online's total fiscal 1994 revenue reached $104.4 million, a 161% increase over fiscal 1993 revenue of $40.0 million. Net income was $6.2 million, compared to net income of $4.2 million for fiscal 1993.

- Net service revenue (fees from subscribers) increased by 163% to nearly $101 million. Other revenue, which consists primarily of third-party development and marketing funding, rose to more than $3.4 million.

- In the five-year summary on the following page, net income reported for fiscal 1993, 1992, 1991 and 1990 include extraordinary tax benefits of $1.1 million, $1.3 million, $556,00 and $61,000, respectively, associated with tax benefits arising from net operating loss carryforwards.

- Increases in service revenues for 1994 were attributed primarily to an increase in the number of subscribers.

© INPUT 1995 Reproduction prohibited.

America Online, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

	Fiscal Year				
Item	6/94	6/93	6/92	6/91	6/90
Net service revenue	$101.0	$38.5	$26.2	$19.5	$17.3
Other revenue	3.4	1.5	0.4	1.9	2.2
Total	$104.4	$40.0	$26.6	$21.4	$19.5
• Percent change from previous year	161%	50%	24%	10%	29%
Income (loss) before taxes and extraordinary items	$6.2	$3.1	$2.2	$0.9	$0.1
• Percent change from previous year	100%	41%	144%	800%	102%
Net income (a)	$6.2	$4.2	$3.5	$1.5	$0.2
• Percent change from previous year	48%	0%	133%	650%	104%
Earnings per share (a)	$0.76	$0.60	$0.64	$0.32	$0.05
• Percent change from previous year	27%	(10%)	100%	540%	103%

(a) Includes tax benefits of $1.1 million ($0.17 per share), $1.3 million ($0.24 per share), $556,000 ($0.12 per share) and $61,000 ($0.02 per share) for fiscal 1993, 1992, 1991 and 1990, respectively, arising from net operating loss carryforwards.

Interim Results

Revenue for the six months ending December 31, 1994 reached $128.4 million, a 194% increase over $43.6 million for the same period in 1993. Numbers have been restated to reflect the pooling of interests acquisition of Redgate Communications in August 1994.

- Net losses of $37.7 million reflect a $42.8 million charge associated with research and development acquired with BookLink Technologies and NaviSoft and $1.7 million in merger expenses.

Market Financials

America Online's subscriber base includes consumers in the U.S. and Canada.

Geographic Markets

One hundred percent of America Online's revenue is derived from the U.S. and Canada.

America Online has offices in Vienna (VA), Boston (MA), Jacksonville and Vero Beach (FL), Tucson (AZ) and Hillsborough (CA).

Acquisitions

In February 1995, America Online completed the acquisition of Advanced Network & Services, Inc. (ANS), creator of the Internet backbone, for $35 million in cash and America Online common stock.

- The acquisition included ANS' wholly owned subsidiary, ANS CO+RE Systems, Inc., which provides virtual private data network services, Internet access, network security and related services to major business.

© INPUT 1995 Reproduction prohibited.

- The acquisition is expected to strengthen America Online's networking strategy to rapidly deploy network capacity from multiple sources.

In December 1994, America Online acquired two Internet companies that form the nucleus of America Online's Internet Services Company.

- In December 1994, America Online acquired BookLink Technologies, Inc. from CMG Information Services for 710,000 shares in America Online common stock. BookLink developed the InternetWorks interface for Internet viewing/browsing.

- In November 1994, America Online acquired NaviSoft, Inc. for 130,000 shares of America Online common stock. NaviSoft has developed a collection of software products currently in test that provide content companies with advanced navigation and reporting tools for information products across multiple networks, computing platforms and sites.

In August 1994, America Online completed the acquisition of Redgate Communications Corporation of Vero Beach (FL) for approximately 447,000 shares of America Online common stock. The acquisition was accounted for as a pooling of interests.

- Redgate was a privately held company with approximately 100 employees and annual revenue of $13 million for calendar 1993.

- Redgate—a new media and interactive marketing services company—also manages multimedia content databases and delivers its content via custom publications, CD ROM, cable, broadband, demand fax, private satellite networks and digital shopping clubs.

- Redgate operated out of offices in Vero Beach, San Francisco (CA), Cambridge (MA), Denver (CO), Greenwich (CT) and Paris (France).

- Redgate's partners and customers include Apple Computer, IBM, EDS, BellSouth, U S WEST, Fidelity, Sun Microsystems, Intel, Olivetti, Racal Datacom, Knight-Ridder, Novell, Xerox, Microsoft, Motorola, NYNEX, Prudential, Pacific Bell, Hewlett-Packard and Fairway Technologies.

- Redgate now operates as a wholly owned subsidiary of America Online.

Employees

As of June 30, 1994, America Online had 527 employees. The company currently has approximately 1,400 employees.

Key Products and Services

America Online offers a range of services, including electronic mail, conferencing, news, sports, weather, stock quotes, software, computing support, on-line classes and Internet access, as follows.

- A key feature of America Online's services is the ease with which subscribers with related interests can communicate in real-time conferences, through electronic mail and on bulletin boards. These interactive communications facilities allow people to share information or ideas, exchange advice and socialize.

- America Online promotes real-time on-line communication by scheduling conferences or discussions on specific topics. Electronic mail services allow subscribers to send messages to other members' private electronic mailboxes or to nonsubscribers via fax, U.S. mail or an international electronic mail gateway. Public bulletin boards allow subscribers to share information and opinions on subjects of general or specialized interest.

During late 1994, America Online expanded its content to reflect the addition of five new service areas. The range of services offered by America

© INPUT 1995 Reproduction prohibited.

Online is summarized in Exhibit A and includes the following fourteen categories:

- *Computing*—Subscribers can access tens of thousands of public domain and "shareware" software programs that can be downloaded for personal use. They can also get assistance on computing questions from more than 250 PC and Mac vendors who maintain technical support areas on service. Developers are available to answer questions through conferences or bulletin boards. Additionally, subscribers can access information from magazines such as MacWorld, PC World and Compute, talk to editors and interact with other subscribers.

- *Today's News*—Up-to-the-minute news, business news, sports and entertainment news from over 20 national and international wire services is provided, including Reuters, UPI and Business Wire. Members can get updated local weather information and download national weather maps.

- *Personal Finance*—With StockLink, members can keep track of stock and option prices listed on various exchanges such as NYSE and NASDAQ, and maintain an updated portfolio. Other services include The Microsoft Small Business Center, Investor's Network and a Tax Forum.

- *Travel*—Subscribers can plan travel using information found in The Traveler's Corner, hosted by Weissman's Travel Reports; book airlines, hotels and rental cars through EAASY SABRE; and share travel experiences and adventures in The Travel Forum. Information is also provided about golf resorts, bed and breakfasts throughout the country and travel advisories.

- *Shopping*—Services are available for office products, a flower shop, computer products and a classified area. Soon subscribers will be able to order groceries and pharmacy items on America Online and have them delivered to their home.

- *People Connection*—The service features a list of member created "real-time" chat rooms on a variety of topics. Center Stage is a "virtual auditorium" where more than one thousand members can gather to interview celebrities and well-known personalities during scheduled events.

- *The Newsstand*—More than 35 magazines and newspapers on a variety of special interest topics are provided, ranging from *Car & Driver* to *Windows Magazine*.

- *Clubs & Interest*—America Online's service provides a collection of more than 50 clubs and special interest forums dedicated to hobbies and support groups. In addition, America Online works with various organizations to provide specialized content and areas on its service.

- *Education*—On-line members can participate in on-line classes, visit The Library of Congress, The Smithsonian Online and read National Geographic. This area also offers The Parent's Information Network and The NEA Forum.

- *Reference Desk*—Members can search more than 60 information databases ranging from The Bible to the Internet.

- *Kids Only*—America Online provides news; sports; encyclopedia searches; computer games; computer art information; various clubs; reviews on TV books and movies; and talk with other kids.

- *Sports*—Sports information is provided in the area of sports news, current events, fantasy sports leagues, DataTimes Sports Reports, college teams and NFL football.

© INPUT 1995 Reproduction prohibited.

Exhibit A

America Online
Sample of Service and Content Providers

Learning and Reference	News and Finance	Travel and Shopping	Games and Entertainment	Lifestyles and Interest
Library of Congress	The New York Times	EAAsy Sabre	Soundbites	SeniorNet
National Geographic	Chicago Tribune	Comp-U-Store	Comedy Clubs	BikeNet
College Board	San Jose Mercury News	Auto Vantage	The Trivia Club	National Space Society
CNN	Time Magazine	Classifieds	The Grandstand	Astronomy Club
National Education Association	The New Republic	800-FLOWERS	Neverwinter Nights	Backpacker
Smithsonian	Scientific American	Computer Express	Omni	Bicycling
Simon & Schuster	The Monthly Business Report	PC Catalog	Rabbit Jack's Casino	American Association of Retired Persons
BKG America	NBC	Kmart Home Delivery	Play-by-Mail Games	MTV
Road and Track	ABC	Shoppers Express	Book and Movie Review	Saturday Review
Consumer Reports	Business Week Online	Weissman Travel Reports	Entertainment Weekly	Aviation Club
Disney Adventures	The Capital Connection	Destination Florida	ROCKLINE	Cooking Club
Barrons Booknotes	Hoovers Handbook Database	Independent Traveler	QB1	Environmental Club
Popular Photography	The Atlantic Monthly	ExpressNet	Uppercut	Baby Boomers Forum
America Federation of Teachers	Reuters	Preview Vacations Online	Powerplay	National Museum of American Art
Electronic University Network	Morningstar Mutual Funds		Showdown	
	1995 Tax Forum		Countdown	
	Vanguard Online			
	Investor's Business Daily			

- *The Internet Connection*—America Online created the Internet Center to make the Internet's resources more accessible and easy to use for America Online subscribers.
 - The Internet Center features graphical icons to provide simple navigation through the complexities of the Internet.
 - Members can currently send and receive unlimited amounts of mail through the Internet, participate in all available USENET newsgroups, search WAIS and Gopher Databases, learn about upcoming features (Telenet & FTP), have World Wide Web access, and participate in discussions about netiquette and other topics in the message board area.
 - America Online plans to offer other Internet features such as TCP/IP network connections.
- In addition, a new Post Office center hosts all mail-related functions such as fax, mailgram, Internet gateway and other electronic mail-related functions.

America Online offers its on-line services through *America Online*, its proprietary software package.

© INPUT 1995 Reproduction prohibited.

The company supports all leading platforms, including Windows, DOS and Macintosh and are available on personal digital assistants (PDAs).

During 1994, America Online introduced Multimedia User Interface, an extension of the companies strategy to develop seamless integration of photos, graphics, text and sound to enrich the on-line experience of subscribers.

Pricing

Services are priced on a monthly subscription basis. Subscriptions are automatically renewed each month and fees are electronically charged to credit cards or debited from checking accounts until a subscriber requests cancellation. During fiscal 1994, the average monthly net service revenue per paying subscriber was approximately $15.00.

The standard monthly membership fee is $9.95, which include five hours of access per month. The hourly fee for usage beyond that included with membership is $2.95.

Customer Services

America Online provides on-line support and telephone support services.

Once a customer subscribes, America Online implements retention marketing programs designed to increase customer loyalty and to maximize customer subscription life. These programs include regularly scheduled on-line events and conferences, on-line promotions of new services and additions of new software programs.

Network Operations

Subscribers currently connect to America Online's services using standard phone lines. America Online has contracted with third party data networks so that subscribers in more than 700 cities in the U.S. and Canada can dial a local number to connect to these services. The cost of using these local access number is paid for by America Online and included in the standard rates charged to subscribers.

America Online's host computer consists of a series of Stratus fault-tolerant minicomputers connected by a token ring network and Hewlett-Packard workstations.

America Online's telecommunications network consists of the public packet switching networks provided by Sprint, BT Tymnet and Datapac. Sprint is America Online's primary provider of both voice and data telecommunications services. America Online is also creating its own network—AOLnet.

Marketing and Sales

The overall goal of America Online's marketing programs is to increase the visibility of the America Online brand and to make it easy for consumers to try its services. America Online attracts new subscribers through independent direct marketing programs and a variety of other cooperative marketing efforts.

Independent Marketing—America Online implements a variety of targeted, direct marketing programs aimed at the installed base of personal computer and modem owners. These programs include advertising in computer-related magazines, direct mail and subscriber referral programs. During 1993, America Online began marketing its services by including a starter kit with various computer-related magazines and offering the Official America Online Tour Guide

Partner Marketing—America Online works with two types of marketing partners:

- *Bundling/OEM*—America Online has entered into marketing agreements with a number of personal computer, modem and software companies.

- *Affinity Groups/Associations*—America Online has agreements with affinity groups and associations as well as other third parties who market America Online directly to their specialized customer bases. For example, the Tribune Company, The New York Times and Knight-Ridder each currently offer "local editions" of America Online, which include content from a variety of local sources and

© INPUT 1995 Reproduction prohibited.

Scholastic, Inc. markets a special edition of America Online under the Scholastic Network to its customer base.

Alliances

America Online has allied with over 300 leading hardware and software vendors to develop new technologies, jointly market products and provide an efficient on-line source of product support to their customers.

Comarketing/Bundling Agreements:

Modem bundling agreements are with Nuvo, Viva, U.S. Robotics and Zoom.

The company has computer hardware preinstall agreements with Acer, Apple, AST, Compaq, Compudyne, Dell, IBM and NEC.

America Online has bundling agreements with major PC and personal digital assistant (PDA) manufacturers. America Online software is now packaged with the Casio Zoomer, Sharp Personal Information Assistant, Motorola Envoy and Sony's Magic Link PIC-1000 personal intelligent communicator.

In addition, America Online has announced alliances with Apple, General Magic, Sharp Electronics and Casio Computer to produce a customized version of its service for palmtop devices.

In January 1995, America Online announced agreements with AT&T Wireless Services and MobileMedia to provide personalized paging services.

- AT&T Wireless Services and MobileMedia paging customers who subscribe to America Online will be able to receive personalized messages via their paging device, including E-mail, news and stock quotes from America Online.
- All America Online subscribers will be able to send pages to any AT&T Wireless Services and MobileMedia paging customers.

Licensing Agreement:

In December 1992, America Online entered into a licensing agreement with Apple Computer. Under the agreement, America Online granted Apple a nonexclusive license to use the America Online services platform for Apple-branded on-line services. and agreed to provide development services to Apple on a fee-for-services basis. Two Apple on-line services have been announced as a result of this agreement—eWorld and NewtonMail.

Competition

Direct competitors include Prodigy (a joint venture of Sears and IBM), CompuServe and Apple (through its new e-World on-line service).

GEnie (from GE Information Services) and Delphi (a unit of News Corporation) are also competitors.

INPUT Assessment

As interactive on-line services have shifted to graphical user interfaces, traditional competitors like CompuServe and Prodigy have struggled with the shift. Consumer migration to Windows has created a tremendous opportunity for America Online to gain market share. America Online launched its Windows product in January 1993 and is already on the way to establishing a strong market position in the Windows segment to match its position in the Macintosh market.

America Online has also staked out a market position in offering services for access to the Internet. It is also planning to extend its platform to support new conduits such as wireless and cable. These new conduits will extend the delivery of America Online outside the traditional public data network environment.

The proliferation of access devices and conduits for on-line services creates uncertainty for market

© INPUT 1995. Reproduction prohibited.

participants and prospective market entrants. America Online is well positioned as a strategic partner, to speed market entrance for media companies seeking to leverage their content.

Powerful companies such as Apple, Microsoft and AT&T are entering the on-line services market and the challenge for America Online will be to leverage its current subscriber growth and alliances with the media companies.

America Online must add system capacity to assure that its subscribers can readily access the network.

© INPUT 1995 Reproduction prohibited.

Company Profile

A Publication from INPUT's Vendor Analysis Program

April 1994

America Online, Inc.

Chairman: James V. Kimsey
President & CEO: Stephen M. Case
8619 Westwood Center Drive
Vienna, VA 22182-2285
Phone: (703) 448-8700
Fax: (703) 883-1509

Status:	Public
Employees:	400 (4/94)
Revenue:	$ 40,019,000
Fiscal Year End:	6/30/93

Key Points

- America Online, Inc. is the fastest growing provider of on-line services to consumers. The company offers subscribers a wide variety of services, including electronic mail; news, weather, sports and stock quote information; conferencing capabilities; access to software; and on-line classes.
- For the quarter ending December 31, 1993, America Online's revenues rose 130% over the same period in 1992 and more than 144,000 new subscribers were added. In March 1994, America Online announced that the number of subscribers had nearly tripled over the past year, topping the 700,000 mark.
- On January 31, 1994, America Online announced it had joined with Shoppers Express, the nation's largest shop-at-home company, to provide interactive home grocery and pharmacy delivery services to its subscribers. This new service is scheduled for the second quarter of calendar 1994.
- America Online has recently reported a new series of content alliances designed to open up new populations of subscribers. Agreements have been

© INPUT 1994 Reproduction prohibited

announced with Reuters, Morningstar Mutual Funds, NBC and New York Times.

- America Online also has announced new bundling agreements with major PC and personal digital assistant (PDA) manufacturers. America Online software is now packaged with the Casio Zoomer, Sharp Personal Information Assistant and Motorola Envoy.

- In March 1994, America Online announced its expansion of Internet support through the launch of USENET Newsgroups and a preview of WAIS and Gopher Databases, making it the first national on-line service to offer consumers access to Internet content through an easy-to-use graphical interface.

Company Description

America Online offers a range of on-line network and electronic information services, including electronic mail, conferencing, software, computing support, interactive magazines and newspapers and on-line classes.

- The company was founded in 1985 as Quantum Computer Services, Inc.

- In October 1991, the company changed its name to America Online to more accurately reflect the nature of its operations.

America Online currently has more than 700,000 subscribers in the U.S. and Canada. The number of subscribers has increased significantly over the past year as indicated in the table below:

America Online, Inc.
Subscribers at Quarter-End

Item	3/94	12/93	9/93	6/93	3/93
Number of subscribers	+700,000	531,000	350,000	302,500	244,650

In March 1992, America Online completed an initial public offering of two million shares of common stock, generating net proceeds of approximately $10.3 million. In December 1993, the company successfully completed a second public offering of one million shares of common stock which generated approximately $62 million in cash.

Operations/ Structure

On April 26, 1993, America Online, Inc. announced the election of its president Steve Case, to the additional position of chief executive officer.

The company has also announced the creation of four new business units—Media, Computing, Education/Special Interests and Personal Finance—to allow

© INPUT 1994 Reproduction prohibited.

America Online to take advantage of emerging business opportunities.

- *Media:* Jonathan Bulkeley has been named general manager, with responsibility for alliances with newspapers and magazines.
- *Computing:* Lyn Cameron has been named general manager, with responsibilities for alliances with computer software and hardware companies.
- *Education and Special Interests:* Jack Daggit has been named general manager, with responsibilities for establishing alliances with associations, strengthening America Online presence in the education market and expanding the information content on America Online.
- *Personal Finance:* Katherine Borsecnik has been named general manager, with responsibility for building marketing and content alliances.
- In addition, Audrey Weil has been named vice president of Corporate Development, with the responsibility for developing strategies and alliances to enter new markets.

Company Strategy

America Online's goal is to increase the visibility of the America Online brand, to make it easy for consumers to try its services and provide compelling reasons for them to continue as paying subscribers. In support of this strategy, the company has expanded its marketing efforts, initiated a new, affordable pricing structure and has continued to add new content.

- America Online's focus has been to broaden the accessibility of its system by negotiating bundling options with OEM partnerships, expanding media partnerships and adding new platforms.
- Over the past several years, the company has launched versions of its service for Windows, DOS and the Macintosh to supplement its original Apple II and Commodore offerings.
- The market for interactive services is expanding beyond PCs to reside on personal digital assistant devices (PDAs) and "smart" boxes that interface with cable TV and provide interactive services. America Online is positioned to take advantage of new delivery vehicles to the consumer market, as evidenced by its enthusiastic entrance into the customized delivery of services for PDAs and extending support to new conduits, such as wireless, cable and the Internet.
- America Online continues to announce new content alliances designed to generate new populations of subscribers. Recent agreements have been announced with Reuters, Scientific American, Interactive Services Association, Morningstar Mutual Funds, NBC, WETA and New York Times.
- During fiscal 1993, America Online implemented a new, simple pricing structure, with a flat monthly fee of $9.95 for up to five hours of service each month. The company also lowered the hourly fee for usage beyond the five

© INPUT 1994. Reproduction prohibited.

hours included with the membership to $3.50.

Financials

America Online's total fiscal 1993 revenue reached $40.0 million, a 50% increase over fiscal 1992 revenue of $256.6 million.

- Net service revenue (fees from subscribers) increased by 47% to $38.5 million. Other revenue, which consists primarily of third-party development and marketing funding, rose to more than $1.5 million.
- In the five-year summary that follows, net income reported for fiscal 1993, 1992, 1991 and 1990 include extraordinary tax benefits of $1.1 million, $1.3 million, $556,00 and $61,000, respectively, associated with tax benefits arising from net operating loss carryforward.

America Online, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

	Fiscal Year				
Item	6/93	6/92	6/91	6/90	6/89
Net service revenue	$38.5	$26.2	$19.5	$17.3	$15.1
Other revenue	1.5	0.4	1.9	2.2	--
Total	$40.0	$26.6	$21.4	$19.5	$15.1
• Percent change from previous year	50%	24%	10%	29%	N/A
Income (loss) before taxes and extraordinary items	$3.1	$2.2	$0.9	$0.1	$(5.7)
• Percent change from previous year	41%	144%	800%	102%	N/A
Net income (loss) (a)	$4.2	$3.5	$1.5	$0.2	$(5.7)
• Percent change from previous year	20%	133%	650%	104%	N/A
Earnings (loss) per share (a)	$0.63	$0.64	$0.32	$0.05	$(1.60)
• Percent change from previous year	(2%)	100%	540%	103%	N/A

(a) Includes tax benefits of $1.1 million ($0.17 per share), $1.3 million ($0.24 per share), $556,000 ($0.12 per share) and $61,000 ($0.02 per share) arising from net operating loss carryforward.

Increases in service revenues were attributed primarily to an increase in the number of subscribers.

- Revenues from IBM-compatible and Macintosh subscribers increased 64%, which more than offset a 36% decline in revenues from Commodore and Apple II subscribers. Approximately $35.5 million of fiscal 1993 net services revenue came from IBM compatible and Macintosh users and $2.9 million from Commodore and Apple II users.
- The increase in net service revenue from IBM compatible subscribers was

© INPUT 1994 Reproduction prohibited.

primarily due to the company's launch of the Windows version of America Online in January 1993. The decline in Commodore and Apple II subscribers and services revenues is a result of the continuing decrease in sales and related decrease in the use of these computers.

- Other revenue increased due to the product development agreement with Apple.

Interim Results: Revenue for the six months ending December 31, 1993 reached $37.5 million, a 119% increase over $17.1 million for the same period in 1992. Income before tax benefits was nearly $2.3 million, compared to $1.5 million for the same period a year ago.

Market Financials

America Online's subscriber base includes consumers in the U.S. and Canada.

Geographic Markets

One hundred percent of America Online's revenue is derived from the U.S. and Canada.

The company's only office is in Vienna (VA).

Employees

As of June 30, 1993, America Online had 236 employees. The company currently has approximately 400 employees.

Key Products and Services

America Online offers a range of services, including electronic mail, conferencing, news, sports, weather, stock quotes, software, computing support and on-line classes as follows.

- Communications: Subscribers with related interests can communicate in real-time conferences, through electronic mail, facsimile services and on bulletin boards. These interactive communications facilities allow people to share information or ideas, exchange advice and socialize. America Online promotes real-time on-line communication by scheduling conferences or discussions on specific topics. Electronic mail services allow subscribers to send messages to other members' private electronic mailboxes or to nonsubscribers via fax, U.S. mail or Internet addresses. Public bulletin boards allow subscribers to share information and opinions on subjects of general or specialized interest.

- Computing: Subscribers can access tens of thousands of public domain or "shareware" software programs that can be downloaded for personal use. They can also get assistance on computing questions from more than 300 hardware and software developers such as Microsoft, Claris and WordPerfect, who support their products on-line. Developers meet with their customers in conferences as well as by answering questions posted on electronic bulletin boards. Additionally, subscribers can access information from magazines such as MacWorld, PC World and Compute, talk to editors and interact with other subscribers.

- Entertainment: America Online has developed several multiplayer games that combine color graphics and sound with real-time communication and

© INPUT 1994. Reproduction prohibited.

competition between players. To maximize marketing value and product differentiation, popular game concepts, such as Dungeons & Dragons, have been licensed.

- Education: America Online uses professional teachers to develop real-time interactive classes in subjects of both general and academic interest as well as variety of adult education courses. Tutoring sessions assist students with homework in English, biology and math. An on-line Compton's encyclopedia enables subscribers to locate up-to-date research. National Geographic provides a variety of interactive features, articles and programs. Other services include on-line forums for American Federation of Teachers and National Education Association members and a doctorate program via the Electronic University Network.

- Information: America Online offers a range of information services, including domestic and international news, weather, sports reports, movie reviews, stock market prices and personalized portfolio tracking. A search capability enables subscribers to quickly scan the news wires to locate stories of interest.

- Transactions: Subscribers can book airlines, hotels and rental cards through the Sabre reservations system, order products through a phone-based discount shopping service and buy or sell stocks through a discount brokerage service. The company has also added the Shoppers Express interactive home grocery and pharmacy delivery service.

High profile media companies work with America Online to create electronic communities to better serve their subscribers. Subscribers can tap into America Online to get additional information, read articles, communicate with editors and participate in dynamic discussions. A listing of America Online's media partners is shown in the exhibit.

America Online offers its on-line services through *America Online,* its proprietary software package. The company supports all leading platforms, including Windows, DOS, Macintosh and Apple II.

- *America Online* operates with virtually all PCs.

- *America Online* offer a graphical user interface with overlapping windows to hold and display text that can be freely manipulated, in conjunction with menus of commands that can be selected with a mouse.

© INPUT 1994 Reproduction prohibited.

American Online, Inc.

Media Partners

The Newspaper Association of America	Mac World Magazine
Backpacker Magazine	IMBA Trail News Magazine
Chicago Tribune	Knight-Ridder
The Bike Report	Library of Congress
COMPUTE	MacHome Journal
CNN	Home Office Computing
Bicycling Magazine	National Geographic
C-SPAN	National Public Radio
The Atlantic Monthly	Boardwatch Magazine
PC Today	Sci-Fi Channel
The New York Times	WETA
OMNI Magazine	Nightly Business Report
PC Novice	Saturday Review
PC Magazine	Wired Magazine
The New Republic	Time Magazine
PC World Magazine	Windows Magazine
QST Magazine	SeniorNet Newsline
San Jose Mercury News	Worth Magazine
Pro Bike News	Court-TV
Scientific American	USA Today
NBC	Tribune Company
Reuters New Media Inc.	

Marketing and Sales

America Online's marketing strategy has been to increase company direct mail programs, bundle America Online software with computers and modems and finally, establish alliances with media companies.

- The majority of the subscriber growth in fiscal 1993 was directly attributed to direct marketing plans aimed at the installed base of personal computer and modem owners. These programs include advertising in computer-related magazines, direct mail and subscriber referral programs.
- America Online has also supplemented its direct mail campaign with several new initiatives, one being, bundling a trial disk for the service with magazines sold on newsstands.
- America Online has also launched a retail program, offering consumers an America Online Membership Kit through leading bookstores and software retailers.

© INPUT 1994 Reproduction prohibited.

- Additionally, America Online has been preinstalled on most leading consumer computers.

Alliances

America Online has allied with over 300 leading hardware and software vendors to develop new technologies, jointly market products and provide an efficient on-line source of product support to their customers.

Comarketing/Bundling Agreements:

America Online has software bundling agreements with Claris, Geoworks, Lotus, Microsoft and Phoenix Technologies.

Modem bundling agreements are with Everex, Nuvo, Viva, U.S. Robotics and Zoom.

The company has computer hardware preinstall agreements with Acer, Apple, AST, Compaq, Compudyne, Dell, IBM, NEC and Tandy.

In addition, America Online has announced alliances with Apple, General Magic, Sharp Electronics, Casio Computer and Tandy to produce a customized version of its service for palmtop devices.

Network Access:

In April 1993, America Online announced it had entered into an agreement with Sprint. This agreement gives America Online strategic pricing for access to the Sprint network and allows America Online to maintain competitive pricing while expanding its subscriber base.

Licensing Agreement:

In December 1992, America Online entered into a licensing agreement with Apple Computer. Under the agreement, America Online granted Apple a nonexclusive license to use the America Online services platform for Apple-branded on-line services, and agreed to provide development services to Apple on a fee-for-services basis. Two Apple on-line services have been announced as a result of this agreement—eWorld and NewtonMail.

Competition

Prodigy Information Services and CompuServe are America Online's key competitors.

INPUT Assessment

As interactive on-line services have shifted to graphical user interfaces, traditional competitors like CompuServe and Prodigy have struggled with the shift. Consumer migration to Windows has created a tremendous opportunity for America Online to gain market share. America Online launched its Windows product in January 1993 and is already on the way to establishing a strong market position in the Windows segment to match its position in the Macintosh market.

America Online has also staked out a market position in offering services for new access devices like PDAs. It is also planning to extend its platform to support new conduits such as wireless, cable and the Internet. These new conduits will extend the delivery of America Online

© INPUT 1994 Reproduction prohibited.

outside the traditional public data network environment.

The proliferation of access devices and conduits for on-line services creates uncertainty for market participants and prospective market entrants. America Online is well positioned as a strategic partner, to speed market entrance for media companies seeking to leverage their content.

New and powerful companies such as Apple, Microsoft and AT&T are entering the on-line services market and the challenge for America Online will be to leverage their current subscriber growth and alliances with the media companies.

© INPUT 1994 Reproduction prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

November 1996

Ameritech Corporation

Chairman & CEO: Richard C. Notebaert
30 South Wacker Drive
Chicago, IL 60606
Phone: (312) 750-5000
Internet: http://www.ameritech.com

Status:	Public
Employees:	65,790 (9/96)
Revenue:	$13,427,800,000
Fiscal Year End:	12/31/95

Key Points

- Ameritech, one of the seven regional telecommunications companies formed by the breakup of the Bell System in 1984, provides communications and network services to both commercial and residential markets.
- Ameritech currently has 19.6 million access lines, 2.3 million cellular customers, and more than one million paging customers. The company currently boasts 386 lines per telephone company employee.
- In October 1996, Ameritech opened an office in Brussels (Belgium), establishing a headquarters for its European operations and an expansion center for new business ventures.
- In September 1996, Ameritech formed a strategic alliance with FirstService Corporation by purchasing the security monitoring assets of Pre-Alert Security Systems, Inc. and certain security monitoring accounts of Intercon Security Ltd., a unit of FirstService Corporation.
- In March 1996, a consortium of which Ameritech is a member became the strategic partner of Belgacom S.A., Belgium's national telecommunications company.

© INPUT 1996 Reproduction prohibited

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

- In March 1996, Ameritech changed the name of The National Guardian Corporation to SecurityLink℠ from Ameritech. National Guardian was acquired by Ameritech in October 1995, expanding the company's customer base to 340,000 throughout the U.S. and Canada.

- During 1995, Ameritech launched a new managed services venture with IBM to pursue opportunities managing desktop computing and communications.

- In September 1995, Ameritech, The Walt Disney Co., and four other partners entered into a joint venture called americast™ to provide an alternative to traditional cable TV.

- In 1995, Ameritech created Ameritech New Media, Inc., a separate subsidiary to build and operate standalone cable TV systems.

- In April 1995, Ameritech announced Ameritech Dedicated Internet Access Service to deliver fully managed, dedicated Internet access service.

- During 1995, Ameritech continued its expansion into international markets through a newly awarded privatization in Belgium, a larger stake in MATAV of Hungary, and a new venture with Chinacom.

Company Description

Ameritech is a leading global supplier of full-service communications and advanced information services. The company provides telephone, cellular, paging, data, leasing, and advertising services as well as systems integration, systems operations, and network services.

During 1994, Ameritech became the first regional company to completely replace rate of return regulation with price cap regulation throughout its region.

- The various state price cap regulation plans allow Ameritech to keep what it earns and provide the company greater flexibility to vary prices to meet the needs of a competitive marketplace.

- In 1995, the FCC approved pure price cap regulation for Ameritech, enabling it to operate without regulatory limits on earnings in any jurisdiction.

- In 1996, the passing of the Telecommunications Act of 1996 set mechanisms for local competition and allowed Ameritech to offer long-distance services to cellular customers.

Organization and Structure

Ameritech has formed a business-unit organization based around customer needs and formed a five-state network organization to serve the business units and their customers.

- The company has consolidated all of its activities under the Ameritech name.

- The functions of the business units overlap the legal entities that form the infrastructure of the company.

- The products and services of all of the companies are marketed under the Ameritech name, but the company's five landline telephone subsidiaries—Ameritech Wisconsin, Ameritech Indiana, Ameritech Illinois, Ameritech Michigan, and Ameritech Ohio—remain responsible within their respective service areas for providing phone and other telecommunications services, subject to regulation by the FCC and the five respective state public utility commissions.

© INPUT 1996 Reproduction prohibited.

In August 1995, the Ameritech business units were further aligned within three business sectors. Each sector is headed by a senior vice president who reports to Dick Notebaert. The sectors and associated vice presidents include:

- *Communications and Information Products*, headed by Barry K. Allen, includes Advertising Services, Information Industry Services, Long Distance Industry Services, Pay Phone Services, Communications, Regulatory Function, and Five State Entities.

- *Consumer and Business Services*, headed by Andrew S. Patti, includes Consumer, Custom, Enhanced, Small Business, and Product Management Services. This sector accounted for approximately 59% of Ameritech's 1995 revenue.

- *Worldwide Network Systems* includes Cellular, New Media Enterprises, Network, and Security Monitoring Services.

Ameritech's business units and unit presidents include the following:

- *Advertising Services*, headed by Peter J. McDonald, provides directory and electronic advertising opportunities to local, regional, and national businesses throughout the Great Lakes region and serves as a directory and marketing consultant.

- *Information Industry Services*, headed by Neil E. Cox, provides a range of services to more than 4,200 network and information providers that buy services from Ameritech and use them in their product offerings to business and residential customers. Customer segments include Independent Telephone companies, Wireless, Competitive Access Providers, Independent Pay Phone Providers, Cable TV, Database, Multimedia, Telemanagement, Interactive Services, Monitoring, and Control Systems Integration.

- *Long Distance Industry Services*, headed by Karen S. Vessely, provides telecommunications products and services to more than 150 interexchange carriers whose primary business is the provision or resale of long-distance services. Services range from access to the local network to SONET rings.

- *Pay Phone Services*, headed by Ellen M. Gardner, provides voice, information, and multimedia pay phone communications products.

- *Ameritech Communications, Inc.*, headed by Steven P. Nowick, provides toll calling and long-distance services to approximately 30% of Ameritech's cellular customers. The unit is prepared to offer long-distance services and packages of services to home and business telephone customers upon approval from regulators under the Telecommunications Act of 1996.

- *Consumer Services*, headed by Mitchell Wienick, is Ameritech's largest business unit, providing approximately 32% of the company's overall 1995 revenue. This unit provides communications services to 11.1 million households in its five-state region. Services include telephone lines, customer premises equipment, and call management services such as Caller ID and Call Waiting.

- *Custom Business Services*, headed by Gregory Q. Brown, provides specialized services to approximately 200 of Ameritech's largest customers, which typically average 5,000 access lines and have multiple in-region and out-of-region locations. Services include data solutions, telephone lines, customer premises equipment, electronic commerce, and desktop managed services.

© INPUT 1996. Reproduction prohibited.

- *Enhanced Business Services,* headed by Ronald L. Blake, assists Ameritech's 62,000 midsize to large business, health care, education, and government customers in developing and installing information and communications solutions. This unit provides telephone lines, customer premises equipment, call management services, and data services.

- *Small Business Services,* headed by Timothy Cawley, provides communications links for more than one million small businesses, which typically have 11 or fewer access lines. Services include telephone lines, customer premises equipment, and call management services.

- *Product Management,* headed by Thomas J. Reiman, promotes increased use and penetration of existing Ameritech services, develops new products, and continually enhances established services.

- *Cellular Services,* headed by John E. Rooney, serves the wireless communications needs of approximately 2.3 million cellular customers and more than one million paging customers in seven midwestern states and Hawaii.

- *Ameritech New Media Inc.,* headed by Deborah L. Lenart, is Ameritech's subsidiary that is building and marketing americast™, Ameritech's enhanced cable TV service which includes 80-90 channels of cable TV programming. Future services may also include home shopping, banking, and interactive services.

- *Network Services,* headed by Thomas E. Richards, addresses improvements in quality, customer service, and cost performance for Ameritech business units and customers.

- *Security Monitoring Services,* headed by Stephen E. Pazian, designs, installs, monitors, and maintains electronic security services marketed as SecurityLink℠ from Ameritech to more than 360,000 homes and businesses in the U.S. and Canada. Services include burglar and fire alarm systems, closed-circuit cameras (CCTV), and electronic card access.

- *Capital Services,* headed by R. Scott Horsley, provides value-added financing to approximately 5,000 business and government customers in all 50 states.

- *International,* headed by Walter S. Catlow, leverages Ameritech's existing telecom competencies and resources to enter attractive international markets, pursues new international communications opportunities, and manages existing international businesses in New Zealand, Hungary, Poland, Norway, Germany, and China.

A three-year summary of source of revenue by business unit is shown on the following page.

Company Strategy

Ameritech's three-part strategy for growth is as follows:

- To be the best full-service communications company, delivering value in communications and information to customers and providing all the services customers want in one stop—including telephone, data, video, cellular, paging, and information.

© INPUT 1996 Reproduction prohibited.

Ameritech Corporation
Revenue by Business Unit

	Fiscal Year		
Business Unit	**1995**	**1994**	**1993**
Consumer	32%	33%	33%
Custom, enhanced, and small business	27%	28%	29%
Long distance	14%	16%	17%
Advertising	8%	8%	8%
Cellular, including paging	8%	7%	5%
All other	11%	8%	8%
Total	100%	100%	100%

- Creating new services for customers in high-growth areas of communications, such as long-distance and interactive services. Ameritech's long-term goal is to generate as much as 20% of its revenues from these new services.

- Reaching customers around the world by participating in international privatizations, alliances, strategic investments, and outsourcing.

 - During 1995, Ameritech led a consortium that was selected as a strategic partner for Belgacom S.A., the national telecommunications company in Belgium.

 - The Ameritech alliance more than doubled its investment in the Hungarian telecommunications company, MATAV, in 1995.

Financials

Ameritech's 1995 revenue reached $13.4 billion, a 7% increase over 1994 revenue of $12.6 billion. Net income was $2.0 billion, compared to a net loss of approximately $1.1 billion in 1994, before one-time items.

A five-year financial summary is shown on the following page.

Ameritech management attributes 1995 results to higher communications network usage resulting from:

- Access line and cellular subscriber growth

- Increases in managed network services

- Increases in new products and services, including call management services, customer premises equipment, and security monitoring

© INPUT 1996 Reproduction prohibited.

Ameritech Corporation
Five-Year Financial Summary
($ Millions, except per-share data)

Item	Fiscal Year				
	1995	1994	1993	1992	1991
Revenue	$13,427.8	$12,569.5	$11,864.7	$11,284.7	$10,983.3
• Percent change from previous year	7%	6%	5%	3%	2%
Income before taxes	$3,094.1	$1,741.4	$2,222.5	$1,973.7	$1,656.4
• Percent change from previous year	78%	(b) (23%)	13%	19%	(8%)
Net income (loss)	$2,008	$(1,063.6)	$1,512.8	$(400.4)	$1,165.5
• Percent change from previous year	(a) 289%	(c) (170%)	478%	(d) (134%)	(7%)
Earnings (loss) per share	$3.63	$(1.94)	$2.78	$(0.75)	$2.19
• Percent change from previous year	(a) 287%	(c) (170%)	471%	(d) (134%)	(8%)

(a) Includes one-time gains of $78.7 million ($0.14 per share) related to restructuring efforts and $41.3 million ($0.08 per share) related to exchange of cellular partnership interests.

(b) Includes work force restructuring charges of $728.1 million, pretax.

(c) Includes a one-time charge of $2,234 million ($4.07 per share) from discontinuance of FAS71.

(d) Includes a cumulative charge of $1,746.4 million ($3.26 per share) from a change in the method of accounting for postretirement benefits.

Revenue Analysis by Product/Service

Ameritech segments its revenue according to the following categories of service:

- Local service revenues include basic monthly service fees and usage charges, fees for custom-calling features, public phone revenues, and installation and connection charges.
- Network access revenues are fees charged to interexchange carriers, such as AT&T and MCI, that use Ameritech's local telecommunications network to provide long-distance services to their customers. In addition, users pay flat-rate access fees to connect to the local network to obtain long-distance service. These revenues are generated from both interstate and intrastate services.
- Long-distance revenues are derived from customer calls to locations outside of the local calling area but within the same service area.
- Directory, cellular, and other revenues include telephone directory publishing, cellular communications, paging services, lease financing, billing and collection services, and telephone equipment sales and installation.

A three-year summary of source of revenue by product/service follows:

© INPUT 1996 Reproduction prohibited.

Ameritech Corporation
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	1995		1994		1993	
Product/Service	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Local service	$5,586	42%	$5,337	42%	$5,065	43%
Interstate network access	2,254	17%	2,218	18%	2,118	18%
Intrastate network access	562	4%	612	5%	623	5%
Long distance	1,457	11%	1,456	12%	1,401	12%
Directory, cellular, and other	3,569	26%	2,946	23%	2,658	22%
Total	$13,428	100%	$12,569	100%	$11,865	100%

Interim Results

Revenue for the nine months ending September 30, 1996 reached $11.0 billion, an increase of 11% over revenue of $9.9 billion for the same period in 1995. Net income reached $1.6 billion, a 13% increase over net income of $1.4 billion for the same period a year ago.

Market Financials

Ameritech's revenues are derived cross-industry, including residential and business customers.

Geographic Markets

International investments represented 6.3% of Ameritech' s assets as of December 31, 1995, compared to 5.4% as of December 31, 1994.

- Such investments are accounted for by using the equity method of accounting. Ameritech's allocable share of the operating results of its international investments is included in other income.
- More than one-third of Ameritech's third quarter 1996 earnings growth was generated by the company's international investments.

Acquisitions

In October 1995, Ameritech acquired The National Guardian Corporation, a wholly owned subsidiary of LET Group PLC providing electronic security services.

- National Guardian had 1994 revenues of approximately $215 million.
- This purchase expanded the company's security monitoring customer base to 340,000 throughout the U.S. and Canada, making Ameritech the second largest provider of security monitoring services in the U.S.

In August 1995, Ameritech acquired ABE Marketing, a Central European-based publisher that produces business-to-business directories for the Czech Republic, Croatia, Slovakia, and Slovenia. This acquisition positions Ameritech as one of the

© INPUT 1996 Reproduction prohibited.

leaders in European business-to-business directories.

During 1995, Ameritech acquired the remaining 10% of "Wer liefert was?" (Who supplies what?), the leading German publisher of business purchasing guides, in which Ameritech had acquired a 90% interest in 1990.

In December 1994, Ameritech entered the electronic security monitoring industry with the purchase of SecurityLink of Oak Brook (1L). The terms of the acquisition were not disclosed.

- SecurityLink had 1993 revenues of nearly $40 million.
- SecurityLink had approximately 44,000 customers located primarily in the Midwest, including the Chicago, Cleveland, Columbus, and Indianapolis metropolitan areas. It also serves customers in Philadelphia and Washington, D.C.
- Ameritech formed a new subsidiary, SecurityLink℠ from Ameritech, through which to offer its newly acquired security monitoring services.

Employees

As of December 31, 1995, Ameritech had 65,345 employees, a 3% increase over 63,594 employees the previous year.

Employee growth was due primarily to new employees in the cellular, security monitoring, and other operating units. These increases were partially offset by a decrease of about 2,400 employees at the landline communications subsidiaries resulting from work force restructuring that began in 1994.

As of August 31, 1996, the company had approximately 65,790 employees.

Key Products and Services

Landline Telephone Services

Ameritech furnishes a range of advanced telecommunications services, including local exchange, toll service, network access, and telecommunications products to 13 million business, residential, and communications company customers in an operating area comprised of 37 Local Access and Transport Areas (LATAs) in Illinois, Indiana, Michigan, Ohio, and Wisconsin.

As of December 31, 1995, 81% of Ameritech's customer lines were served by digital switches and virtually all its lines had been converted to equal access. As of that date, the company had 1.1 million installed strand miles of fiber-optic cable.

- The number of customer access lines grew by 4.5%, primarily due to the increase in residential fax machines, modems, and other equipment.
- Business lines increased 7.2% to 6.2 million.
- Residential lines increased 3.1% to 12.3 million.

Ameritech's landline subsidiaries provide two basic types of telecommunications services:

- Transporting telecommunications traffic between a subscriber's equipment and the telephone exchange offices located within the same LATA (intraLATA). These services include local exchange, private line, and intraLATA toll services (including 800 and special services for data, radio, and video transport).

© INPUT 1996 Reproduction prohibited.

- Providing exchange access service, which links a subscriber's telephone or other equipment to the network of transmission facilities of long-distance carriers, which in turn provides telecommunications service between LATAs (interLATA or long-distance service).

 Ameritech expects to offer landline long-distance service in its five-state region in early 1997, beginning in Illinois and Michigan.

Ameritech also provides directory assistance, local and toll operator services (including collect calls, third-number billing, person-to-person, and calling cards), and offers such digital network services as voice mail, on-line database access, fax messaging, document sharing functions, and videoconferencing for desktop computers.

- In September 1995, Ameritech introduced SmartQuest℠ 800, a bundled call management solution for businesses, providing Caller ID and 800 services, special database software, call adapter, and telephone support.

- Introduced to Chicago and Detroit customers in September 1996, Ameritech's National Directory Assistance service provides local and long-distance numbers across the country without requiring area codes. The company plans to introduce National Directory Assistance to the entire five-state Ameritech area.

Ameritech® Automatic Meter Reading Service permits the reading of customers' gas, electric, and water meters through existing phone lines. The city of Salem (OH) has a 10-year contract with Ameritech for this service.

Through the Ameritech Packet Switch Network provided by Ameritech Ohio, motor vehicle licensing officials in Ohio can access and update all Ohio drivers' licenses and vehicle registration.

Ameritech provides a range of network consulting, integration, and design services to major business, government, and institutional customers.

- Ameritech can integrate voice, data, video-conferencing, and environmental systems, including customer premise equipment, local and long-distance networks, and private networks.

- Ameritech provides custom data connectivity solutions to link customers' operations. *Branch Office Data Connectivity* solutions combine ISDN, frame relay, ATM, and other communications technologies. Ameritech also provides Internet access.

- During 1994, EDS and Ameritech signed a $225 million, seven-year outsourcing contract under which Ameritech is providing maintenance, repair, and upgrades to voice communications systems at more than 300 EDS sites in 41 states.

- Ameritech was awarded a $20 million, five-year contract to maintain Motorola's telecommunications service center.

- Ameritech was awarded a ten-year, $25 million contract with the city of Chicago to support the city's 911 system.

- The State of Michigan has signed a 60-month, $6.3 million master network contract to provide services to state agencies.

© INPUT 1996 Reproduction prohibited.

- Ameritech will build a six-node, $5.9 million SONET ring to meet Comdisco customers' disaster recovery needs.

- Ameritech will provide the City Colleges of Chicago with videoconferencing capabilities, including a T-1 network encompassing 15 locations with VTEL video equipment and multiple bridges.

Ameritech provides the following services in support of other network and information providers:

- Through a strategic alliance with Concentric Network Corporation, Ameritech helps local telephone exchange carriers (LECs) to provide Internet access to their rural customers. Ameritech provides a turnkey service, including network design and maintenance, marketing support, and billing solutions, and Concentric provides the Internet connection, host services, software, credit card verification, billing information, and customer service.

- Ameritech provides billing and collection services for several companies, including billing for long-distance services offered by certain long-distance carriers.

- Ameritech's *UltimateLink* program is designed to meet the needs of the long-distance industry for products, high-quality service, and competitive prices. Ameritech is investing $200 million in network infrastructure for SONET-based high-speed switched and dedicated service.

- In an alliance with Paradigm Technology Ltd. of New Zealand, Ameritech is the exclusive marketing and support arm of Transaction Analysis and Processing System (TAPS) for the U.S. telecommunications industry. TAPS is a software product that provides near-real-time usage rate calculations while reducing operating costs.

- New products for third-party providers include:

 - *Cellular Alarm Terminals* provide cellular backup to security systems.

 - Services provided for Personal Communications networks include both network facilities to support PCS and engineering and consulting services.

 - *Control Services Integration* will provide utility customers with control systems that can sense, measure, monitor and control a range of utility functions.

 - *Infochannel* is a multimedia information system used to distribute information to any number of PCs and television units and can be used in hotels, airports, shopping malls, and on cable TV channels.

 - *Interactive Services Platforms* are designed for companies that market information services such as 976 numbers and voice messaging services to customers.

Interactive Services

In April 1995, Ameritech announced seven Internet initiatives:

- Operating a network access point for Internet service providers

 - Ameritech is one of four providers selected by the National Science Foundation in 1993 to offer a network access point (NAP) for the Internet in the U.S.

© INPUT 1996 Reproduction prohibited.

- The company will operate its NAP over an ATM switch.

- Offering dedicated Internet access throughout the Ameritech region

- Offering dial-up Internet access throughout the Ameritech region

 In March 1995, Ameritech and CCNet, a not-for-profit subsidiary of the Champaign County Chamber of Commerce, entered into a partnership to begin test-marketing two new interactive services in Champaign County (IL): a high-speed Internet Access Service and a home and office communications system that integrates communications and computer functions using the Integrated Services Digital Network (ISDN).

- Offering Internet navigational software through Ameritech Library Services

 NetPublisher and WinPAC are two products introduced by Ameritech Library Services to make the Internet easier to access and navigate.

- Partnering to develop the Internet as a tool for electronic commerce

 In January 1995, Ameritech joined CommerceNet, a nonprofit consortium of organizations working to build an open Internet-based infrastructure for electronic commerce.

- Partnering with the State of Michigan to use the Internet to enhance education

- Maintaining its own presence on the Internet

Ameritech entered the high-growth electronic security monitoring industry in December 1994 with its acquisition of SecurityLink.

- In May 1995, SecurityLink expanded operations to new and existing customers in the Washington, D.C., Maryland, northern Virginia, and Trenton (NJ) areas by opening two new facilities in Cranbury (NJ) and Beltsville (MD).

- In October 1995 Ameritech expanded its position in the industry with the acquisition of The National Guardian Corporation.

- In March 1996, Ameritech renamed its National Guardian security services SecurityLink[SM] from Ameritech, to provide a consistent brand identity and to establish itself as a premier provider of commercial and residential monitored security systems.

- In September 1996, through its Canadian security monitoring subsidiary SecurityLink from Ameritech Ltd., Ameritech entered into a strategic alliance with FirstService Corporation by purchasing the security monitoring assets of Pre-Alert Security Systems, Inc. of Toronto (Ontario).

 - In a separate agreement, Ameritech also acquired certain residential and commercial security monitoring accounts of Intercon Security Ltd., a unit of FirstService Corporation.

 - These agreements with Pre-Alert and Intercon expand Ameritech's reach in the Canadian market by increasing the company's presence in Toronto and forging its entry into Vancouver.

- In November 1996, SecurityLink from Ameritech Ltd. acquired the business of

© INPUT 1996 Reproduction prohibited.

Toronto (Ontario)-based Romex Security Systems Inc. This transaction makes the combined operations the largest security services provider in Canada and raised the customer base to more than 360,000 in the U.S. and Canada.

- Ameritech has plans to offer home and business owners remote monitoring and adjustment of heating, air conditioning, lighting, sprinklers, and appliances through "smart home" and "smart office" services.

Through October 1996, Ameritech has finalized 25 cable TV franchise agreements representing access to more than 1.4 million people and 600,000 households, and has launched service in Chicago, Cleveland, Columbus, and Detroit.

- Ameritech is signing up thousands of customers and growing the market by 10% in some areas.

- The company is building a hybrid fiber-coax digital network capable of eventually delivering multicast and interactive services over more than 300 channels.

Ameritech is also pursuing alliances and partnerships that will position it as a key participant in the emerging era of interactive video, exploring a variety of services with different suppliers of traditional cable TV, video on demand, home health care, interactive educational courses, distance learning, interactive games, shopping, and other entertainment and information services.

- Ameritech has invested in Peapod LP, an interactive home grocery shopping and delivery service. Using a personal computer, more than 14,300 customers in the Chicago and San Francisco areas can choose grocery items and schedule home delivery at their convenience. In 1995, Peapod expanded service by 30%.

- Ameritech has a 25% interest in MN Interactive, Inc. which uses on-line links, CD ROM, dial-up connections, and voice mail to provide music previewing, ordering, and delivery of the latest music CDs from major and independent record producers.

- Ameritech also has an equity investment in KidSoft, LLC, a leading brand for quality educational software for kids through on-line and retail channels.

- Ameritech and Random House have expanded their ownership of Worldview Systems Corporation, a supplier of electronic travel and entertainment information.

 - Ameritech and Random House each now own more than 40% of Worldview Systems, with the remainder reserved for the firm's management team.

 - The company's first product, Fodor's Worldview Travel Update, offers customers, via fax, on-line information services, or mail, time-sensitive destination information that complements Fodor's catalog of printed guidebooks.

- In September 1995, Ameritech, The Walt Disney Company, Bell South Corporation, SBC Communications (formerly Southwestern Bell Corporation), and GTE entered into a joint venture named americast™ to develop, market, and deliver traditional and interactive video programming to customers.

© INPUT 1996 Reproduction prohibited.

- Southern New England Telecommunications joined the alliance in early 1996.

- The service provides customers in 33 states with an alternative to traditional cable TV, as well as two-way services including home shopping, banking, travel planning, and electronic games.

- This joint venture is headed by Stephen Weiswasser, the newly named CEO, who was formerly with Cap Cities.

• Ameritech has invested $472.5 million in GE Information Services (GEIS), a wholly owned subsidiary of General Electric Company and a leader in the global electronic commerce market.

- The investment is in the form of a four-year interest-bearing convertible debenture which, when legal restrictions are removed, converts into a 30% equity interest in GEIS.

- In 1995, GEIS agreed to provide MATAV, the primary telecommunications provider in Hungary and in which Ameritech owns an interest, with electric data interchange technology, enabling it to offer its business and government sector customers enhanced information management capabilities.

Other information services offered by Ameritech include the following:

• Ameritech processes billing and clinical transactions for health care providers through an integrated system of computer software, hardware, and telephone lines.

- Ameritech's health information network enables doctors, hospitals, pharmacies, laboratories, employers, and others in the health care industry to share clinical, demographic, financial, and claims data.

- In Wisconsin, in partnership with Aurora Health Care of Milwaukee, Ameritech developed the Wisconsin Health Information Network, the world's largest interactive health care information network, used by more than 2,000 doctors, hospitals, insurers, medical labs, and pharmacies.

• Ameritech Library Services provides a range of automated library management systems, serving more than 3,700 libraries throughout the U.S. and 32 other countries.

- Clients include the Library of Congress, The Smithsonian Institute, Yale and Harvard universities, Microsoft Corporation, and the New York Public Library.

- Ameritech also offers products that provide access to information databases and networks, creating virtual libraries.

• In 1995, Ameritech and IBM formed a managed services marketing alliance whereby the companies jointly market integrated voice, data, and video managed desktop services for businesses, providing customers with a single point of contact for managing every aspect of desktop-based communications and computing systems.

• In March 1994, Ameritech entered into a joint venture with BC Systems of British Columbia to form CivicLink℠, which allows on-line access to publicly available government records, such as property titles, court records, liens, and construction permits. CivicLink is currently in operation in Marion County

© INPUT 1996 Reproduction prohibited.

(IN), Prince George's County (MD), Los Angeles County (CA), and DuPage, Kane, DeKalb, and Kendall Counties (IL).

- Ameritech and Citibank market a smart phone that is used to pay bills, get stock quotes, transfer money between accounts, order travelers checks, and review balances.

- Confirm & Pay, launched in late 1994, is designed to allow brokerage firms to meet the Securities and Exchange Commission's new three-day trade settlement requirement (T+3) by confirming and settling trades electronically.

Cellular and Other Wireless Services

Ameritech provides cellular and other wireless communications to 2.3 million customers in Illinois, Indiana, Michigan, Missouri, Ohio, and Wisconsin.

- In September 1995, Ameritech began offering cellular service in Cleveland and Indianapolis.

- During 1995, Ameritech's cellular customer base grew by approximately 600,000, a 46% increase over the prior year.

- Subscribers to Ameritech's international wireless joint ventures increased in 1995 to 837,000 from a customer base of 111,000 a year earlier.

- In February 1996, Ameritech began offering long-distance service to its cellular customers. The company demonstrated its capability in the first official call between Chicago and Hamburg (Germany).

- Ameritech has formed strategic cellular partnerships in Poland, Norway, and China and has investments in other cellular providers.

Wireless Packet Data Services, introduced in 1994, provides the mobile data customer with application options to send data over the cellular network.

During 1994, Ameritech became the first cellular carrier in the country to offer its customers the ability to use cellular phones in both North America and Europe. The Ameritech Cellular International Network employs the Global System for Mobile Communications standard.

Ameritech currently provides local and nationwide paging services to customers in Illinois, Indiana, Michigan, Missouri, Minnesota, Ohio, and Wisconsin, using over one million paging units, an increase of 33% over year-end 1995.

- In November 1994, Ameritech won the narrowband personal communications services (PCS) regional license to offer two-way paging in the Midwest.

- In 1997, Ameritech plans to begin building out its system for two-way paging and data services to customers regionwide. The return paging channel will allow users of two-way pagers to acknowledge a page and, eventually, to provide a detailed response.

- In 1995, the company acquired broadband PCS licenses in the Cleveland and Indianapolis major trading areas, covering nearly eight million potential customers. Ameritech currently offers wireless services to customers in Indianapolis and Cleveland through reselling agreements. The company plans to provide facility-based services beginning in 1997.

© INPUT 1996 Reproduction prohibited.

Advertising/Directory Services

Ameritech provides directory and electronic advertising to local, regional, and national businesses throughout the Great Lakes region and serves as an advertising and marketing consultant.

Ameritech publishes more than 450 Ameritech PagesPlus® white and yellow page directories in Indiana, Wisconsin, Ohio, and Michigan and, in partnership with Donnelly Directory, in Illinois and northwestern Indiana, with a total distribution of more than 41 million.

Using new audiotex technology, Custom Connect™ audiotex, available 24 hours a day, 7 days a week, provides consumers and advertisers with a range of information opportunities accessible through special phone numbers.

- Consumers can call for up-to-date information including news, sports, and weather, as well as information about specific products and services.
- Advertisers can provide consumers with updated messages about their businesses, such as sales, discounts, and special hours.
- In October 1996, Ameritech began offering advertising space for a new Internet yellow pages service.

Other products include Ameritech Industrial Purchasing Guides®, targeted to buyers of industrial products, and The Ameritech Business Search™ white and yellow page business reference directories, which are also available in CD ROM.

International

Since 1990, Ameritech has invested approximately $2 billion in Germany, New Zealand, Hungary, Poland, and Norway, and has established offices in China and Belgium.

The company provides cellular service in Norway, and publishes business-to-business directories throughout Europe, including in Germany, Austria, Belgium, Switzerland, Luxembourg, the Netherlands, the Czech Republic, Slovenia, Slovakia, and Croatia. It also provides electronic library services in Sweden, the U.K., France, Ireland, Belgium, the Czech Republic, Germany, Luxembourg, the Netherlands, and Slovakia.

In October 1996, Ameritech opened an office in Brussels (Belgium), establishing a headquarters for its European operations and an expansion center for new business ventures.

- The new office will be responsible for Ameritech's European operations, business development, and strategy.
- The office will be headed by Herbert R. Hribar, vice president of Ameritech International and managing director, Ameritech Europe.

In March 1996, Ameritech and its consortium partners Tele Danmark A/S and Singapore Telecommunications Limited (Singapore Telecom) became the strategic partner of Belgium's national telecommunications company, Belgacom S.A.

- The consortium paid approximately $2.5 billion for a 49.9% interest in Belgacom. This is Belgium's largest single investment by an American company.
- Ameritech has a 35% consortium share and an approximately 17.5% interest in Belgacom.

© INPUT 1996 Reproduction prohibited.

In August 1995, Ameritech entered into a 25-year joint venture with China Communications System Company Ltd. (Chinacom) to build cellular and wired telephone networks in China.

- The joint venture will provide funding, advanced communications technology, and management consulting to assist China in developing its telecommunications sector.

- The venture will initially build a GSM cellular telephone and wireline switched telephone network for Taiyuan, the capitol of Shanxi province. China Unicom, an authorized carrier, will operate the network.

- Ameritech opened an office in Beijing in early 1995.

In 1995, Ameritech acquired the remaining 10% of "Wer liefert was?" (Who supplies what?), the leading German publisher of business purchasing guides, resulting in a total acquisition of the company. The company now produces and distributes business-to-business directories to more than 70,000 customers in Germany, Austria, Switzerland, Belgium, Luxembourg, the Netherlands, the Czech Republic, Croatia, Slovakia, and Slovenia.

In 1995, MagyarCom, an alliance between Ameritech and Deutsche Bundespost Telekom of Germany, increased its ownership of MATAV, the Hungarian telecommunications company, from 30% to 67%. The Hungarian government owns most of the remaining 33%.

- Ameritech and Deutsche Bundespost Telekom of Germany, Europe's largest communications carrier, are equal partners in MagyarCom.

- MATAV has approximately 1.8 million access lines and a goal to increase to 3 million lines in service by the year 2000.

During 1994, Ameritech announced a Pan-American alliance with six other cellular companies, including ALLTEL Mobile, Bell South Mobility, CommNet Cellular, GTE Personal Communications Services, Radiomovil DIPSA S.A. (Telcel, the carrier for the Republic of Mexico), and Southwestern Bell Mobile Systems, to provide a virtual international network throughout much of the U.S. and Mexico. While roaming in the markets of the alliance, Ameritech customers receive automatic call delivery, home customer care, and competitive roaming rates.

Since September 1993, Ameritech and its partners in NetCom GSM have provided digital cellular service in Norway. In 1992, Ameritech and Singapore Telecom, the government-owned telecommunications and postal operator in Singapore, agreed to acquire an equal interest in NetCom totaling an effective 49.9%.

- In 1995, NetCom's customer base was tripled to 235,000 customers.

- Nationwide coverage by the NetCom system is expected within two years.

Since 1992, an Ameritech consortium has operated the Centertel cellular system in Poland. Ameritech and France Telecom, in partnership with Telekomunikacja Polska S.A., Poland's state-owned telephone company, created a joint venture to build the analog cellular system.

In September 1990, Ameritech and Bell Atlantic purchased Telecom Corporation of New Zealand Limited, New Zealand's state-owned principal supplier of domestic and

© INPUT 1996 Reproduction prohibited.

international telecommunications services, including local, long-distance, cellular, satellite TV, and directory services.

- Ameritech and Bell Atlantic each have a 24.8% interest in the company.
- During 1995, New Zealand Telecom's profits increased by 16%.

Marketing and Sales

Ameritech markets its products and services through a direct sales force and through other company authorized dealers.

Competition

Ameritech's major competitors include other access providers, cellular, video, and home security providers, and the other regional Bell operating companies.

The company also faces potential competition from AT&T, MCI Communications Corp., and other long-distance providers that are ready to offer local phone service in various parts of Ameritech's five-state region.

AT&T and McCaw Cellular Communications, Inc. have allied to form expanded cellular markets, creating the possibility of a wireless network with nationwide presence.

Tele-Communications, Inc., Comcast Corp., and Cox Cable Communications are part of a cable company joint venture with Sprint Corporation that plans to offer alternative wireless service.

Assessment

Ameritech considers its strengths to include the following:

- World-class market-based organization/culture
- State-of-the-art, ubiquitous network
- Strong financial position
- Extensive customer relationships

Challenges over the coming year include:

- Successful execution of the company's strategy
- Managing a number of public policy issues, including interconnection, universal service, access charge reform, and long-distance entry

© INPUT 1996 Reproduction prohibited.

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

October 1995

Ameritech Corporation

Chairman & CEO: Richard C. Notebaert
30 South Wacker Drive
Chicago, IL 60606
Phone: (312) 750-5000

Status:	Public
Employees:	62,127 (9/95)
Revenue:	$12,569,000,000
Fiscal Year End:	12/31/94

Key Points

- Ameritech, one of the seven regional telecommunications companies formed by the breakup of the Bell System in 1984, provides communications and network services to both commercial and residential markets.
- In 1994, more than 90% of Ameritech's profit and revenues were from its core business of telephone, cellular, paging, data, leasing and advertising services.
- Ameritech plans to expand into the fast-growing areas of interactive and long-distance services. The company has invested in an interactive home grocery shopping and delivery service and has joint ventures with Random House (electronic travel and entertainment information) and, Walt Disney Company, GTE, BellSouth and SBC Communications (interactive video).
- Ameritech has invested $472.5 million in the convertible debt securities of General Electric Information Services (GEIS), a leading supplier of electronic commerce and information services worldwide.
- In 1994, several key initiatives were implemented to better position the company for competition. These included:
 - Adoption of accounting for competitive enterprises after receiving price regulation in its five-state market

© INPUT 1995. Reproduction prohibited.

- The benefits of work force restructuring

- Approval in December 1994 to construct a video dial tone network.

- Ameritech management's long-term goal is double-digit growth in revenues and earnings.

Company Description

Ameritech is a leading global supplier of full-service communications services and advanced information services. The company provides telephone, cellular, paging, data, leasing and advertising services as well as systems integration, systems operations and network services.

During 1994, Ameritech became the first regional company to completely replace rate of return regulation with price regulation throughout its region.

- The various state price regulation plans eliminate Ameritech's obligation to share earnings with customers and allows the company greater flexibility to vary prices to meet the needs of competitive marketplace.

- In 1995, the FCC approved pure price regulation for Ameritech, thus enabling it to operate without regulatory limits on earnings in any jurisdiction.

Organization and Structure

Ameritech has formed a business-unit organization based around customer needs, and formed a five-state network organization to serve the business units and their customers.

- The company has consolidated all of its activities under the Ameritech name.

- The functions of the business units overlap the legal entities which form the infrastructure of the company.

- The products and services of all of the companies are marketed under the Ameritech name, but the company's five landline telephone subsidiaries— Ameritech Wisconsin, Ameritech Indiana, Ameritech Illinois, Ameritech Michigan and Ameritech Ohio—remain responsible within their respective service areas for providing phone and other telecommunications services, subject to regulation by the FCC and the five respective state public utility commissions.

In August 1995, the Ameritech business units were further aligned within three business sectors. Each sector will be headed by a senior vice president who will report to Dick Notebaert. The sectors and associated vice presidents include:

- *Communications and Information Products*, headed by Barry Allen, includes Advertising Services, Information Industry Services, Long Distance Services. Long Distance Industry Services, Pay Phone Services, Telephone Industry Services, Regulatory Function and Five State Entities.

- *The Consumer and Business Sector* (vice president not yet announced) includes Consumer, Custom, Enhanced and Small Business Services.

- *Worldwide Network Systems*, headed by Timothy Connolly, includes Cellular, New Media Enterprises and Network Services.

Ameritech's business units include the following:

- *Consumer Services*, headed by Mitch Weinick, provides communications services

© INPUT 1995. Reproduction prohibited.

to 10.8 million households in its five-state region.

- *Cellular Services*, headed by John E. Rooney, serves the wireless communications needs of approximately 1.6 million cellular customers and 692,000 paging customer in eight midwestern states and Hawaii.

- *Advertising Services*, headed by Peter J. McDonald, provides directory and electronic advertising opportunities to local, regional and national businesses throughout the Great lakes region and services as a directory and marketing consultant.

- *Pay Phone Services*, headed by Dwayne E. Goldsmith, provides voice, information and multimedia pay phone communications products.

- *Custom Business Services*, headed by Jack E. Reich, provides specialized services to approximately 200 of Ameritech's largest customers, which typically average 5,000 access lines and have multiple in-region and out-of-region locations.

- *Small Business Services*, headed by Tim Cawley, provides communications links for small business, which typically have 11 or fewer access lines.

- *Enhanced Business Services*, headed by Ronald Blake, assists Ameritech's 55,000 midsize to large business, health care, education and government customers in developing and installing information and communications solutions.

- *Leasing Services*, headed by R. Scott Horsley, provides value-added financing to approximately 3,500 business and government customers in all 50 states.

- *Long Distance Industry Services*, headed by Karen S. Vessely, provides telecommunications products and services to more than 150 interexchange carriers whose primary business is the provision or resale of long distance services.

- *Telephone Industry Services*, headed by Ellen M. Gardner, has service relationships with 263 local exchange carriers (LECs) within the Ameritech region and extending services to more than 1,000 LECs nationally.

- *Information Industry Services*, headed by Neil E. Cox, provides a range of services to more than 2,800 network and information providers who buy services from Ameritech and use them in their product offerings to business and residential customers. Customer segments include Wireless, Competitive Access Providers, Independent Pay Phone Providers, Cable TV, Database and Multimedia, Telemanagement, Interactive Services, Monitoring and Control Systems Integration.

- *Network Services*, headed by Gary G. Drook, addresses improvements in quality, customer service and cost performance for the Ameritech business units and their customers.

- *Long Distance Services*, headed by Steve P. Nowick, will head Ameritech's entry into the inter-LATA long distance market.

- *International*, headed by Andres B. Bande, leverages Ameritech's existing telecom competencies and resources to attractive international markets, pursues new international communications opportunities and manages existing international businesses in New Zealand, Hungary, Poland, Norway, Germany and China.

© INPUT 1995. Reproduction prohibited.

A two-year summary of source of revenue by business unit follows:

Ameritech Corporation
Revenue by Business Unit

	Fiscal Year	
Business Unit	**1994**	**1993**
Consumer	33%	33%
Custom, enhanced and small business	28%	29%
Long distance	16%	17%
Advertising	8%	8%
Cellular, including paging	7%	5%
All other	8%	8%
Total	100%	100%

Company Strategy

Ameritech's three-part strategy for growth is as follows:

- To be the best full-service communications company, delivering value in communications and information to customers and providing all the services customers want in one stop—including, telephone, data video, cellular, paging and information.

- Creating new services for customers in high-growth areas of communications, such as long-distance and interactive services. Ameritech's long-term goal is to generate as much as 20% of its revenues from these new services.

- Reaching customers around the world by participating in international privatizations, alliance, strategic investments and outsourcing.

Financials

Ameritech's 1994 revenue reached $12.6 billion, a 6% increase over 1993 revenue of $11.9 billion.

- Net losses of $1.06 billion for 1994 include an extraordinary charge of $2.2 billion related to the discontinuance of FAS71 accounting methods for regulated companies, a one-time charge of $728.1 million ($455.8 million after taxes) related to work force restructuring and a one-time after-tax charge of $61.3 million for certain real estate and assets the company is selling or no longer plans to use in its business.

- Profits before these charges were approximately $1.69 billion in 1994, up more than 13% from 1993.

Ameritech management attributes 1994 results to the following:

- The strong Midwest economy provided a catalyst for the company's success in 1994. Core business operations continued to show strong results with landline telephone business revenues increasing 4.5% to $9.6 billion. A major portion of that growth reflects marketing success for custom calling features such as caller ID and call waiting.

- Access line growth was 3.9% in 1994, resulting in part from second line additions as residences installed fax machines, modems and other uses.

- Cellular customers increased by 51% from a year ago.

- Rate reductions implemented as a result of various state regulatory agreements for landline telephone services, primarily in the network access revenue categories, partially offset these increases.

© INPUT 1995 Reproduction prohibited.

Advertising and promotion costs incurred throughout the businesses in 1994 were $242.5 million, compared to $204.4 million in 1993.

A five-year financial summary follows:

Ameritech Corporation
Five-Year Financial Summary
($ Millions, except per share data)

	Fiscal Year				
Item	1994	1993	1992	1991	1990
Revenue	$12,569.5	$11,864.7	$11,284.7	$10,983.3	$10,773.1
• Percent change from previous year	6%	5%	3%	2%	4%
Income before taxes	$1,741.4	$2,222.5	$1,973.7	$1,656.4	$1,810.5
• Percent change from previous year	(a) (23%)	13%	19%	(8%)	N/A
Net income (loss)	$(1,063.6)	$1,512.8	$(400.4)	$1,165.5	$1,253.8
• Percent change from previous year	(b) (170%)	478%	(c) (134%)	(7%)	--
Earnings (loss) per share	$(1.94)	$2.78	$(0.75)	$2.19	$2.37
• Percent change from previous year	(b) (170%)	471%	(c) (134%)	(8%)	3%

(a) Includes workforce restructuring charges of $728.1 million.

(b Includes a one-time charge of $2,234 million ($4.07 per share) from discontinuance of FAS71.

(c) Includes a cumulative charge of $1,746.4 million ($3.26 per share) from a change in the method of accounting for postretirement benefits.

Revenue Analysis by Product/Service

Ameritech segments its revenue according to the following categories of service:

- Local service revenues include basic monthly service fees and usage charges, fees for custom-calling features, public phone revenues and installation and connection charges.
- Network access revenues are fees charged to interexchange carriers, such as AT&T and MCI, that use Ameritech's local telecommunications network to provide long-distance services to their customers. In addition, users pay flat rate access fees to connect to the local network to obtain long-distance service. These revenues are generated from both interstate and intrastate services.
- Long-distance revenues are derived from customer calls to locations outside of the local calling area but within the same service area.
- Directory, cellular and other revenues include telephone directory publishing, cellular communications, paging services, lease financing, billing and collection services and telephone equipment sales and installation.

A three-year summary of source of revenue by product/service follows:

© INPUT 1995. Reproduction prohibited.

Ameritech Corporation
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	1994		1993		1992	
Product/Service	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Local service	$5,337	42%	$5,065	43%	$5,012	44%
Interstate network access	2,218	18%	2,118	18%	2,041	18%
Intrastate network access	612	5%	623	5%	613	5%
Long-distance	1,456	12%	1,401	12%	1,252	11%
Directory, cellular and other	2,946	23%	2,658	22%	2,367	21%
Total	$12,569	100%	$11,865	100%	$11,285	100%

Interim Results

Revenue for the six months ending June 30, 1995 reached $6,514.6 million, a 5% increase over $6,218.3 billion for the same period in 1994. Net income reached $1,082.4 million, compared to net income of $490.4 for the same period a year ago.

Market Financials

Ameritech's revenues are derived cross-industry, including residential and business customers.

Geographic Markets

INPUT estimates approximately 99% of Ameritech's 1994 revenue was derived from the U.S.

International investments represented 5.4% of Ameritech' s assets as of December 31, 1994.

- Such investments are accounted for by using the equity method of accounting. Ameritech's allocable share of the operating results of its international investments is included in other income.
- Ameritech estimates its pro rata share of revenues in 1994 from these international investments at about $550 million.

Acquisitions

In December 1994, Ameritech acquired SecurityLink, a security monitoring business with annual revenues of approximately $35 million. The operations of SecurityLink will become Ameritech Monitoring Services, a newly formed subsidiary that will design, install, monitor and maintain security alarm systems for approximately 44,000 customers primarily in the Midwest.

Employees

As of December 31, 1994, Ameritech had 63,594 employees, a decrease from 67,912 employees as of December 31, 1993.

The company currently has 62,127 employees.

© INPUT 1995. Reproduction prohibited.

Key Products and Services

Landline Telephone Services

Ameritech furnishes a range of advanced telecommunications services, including local exchange and toll service, network access and telecommunications products to 13 million business, residential and communications company customers in an operating area comprise of 35 Local Access and Transport Areas (LATAs) in Illinois, Indiana, Michigan, Ohio and Wisconsin.

Ameritech's landline subsidiaries provide two basic types of telecommunications services:

- Transporting telecommunications traffic between a subscriber's equipment and the telephone exchange offices located within the same LATA (intraLATA). These services include local exchange, private line and intraLATA toll services (including 800 and special services for data, radio and video transport).
- Providing exchange access service, which links a subscriber's telephone or other equipment to the network of transmission facilities of long-distance carriers, which in tern provide telecommunications service between LATAs (interLATA, or long-distance, service).

Ameritech also provides directory assistance, local and toll operator services (including collect calls, third number billing, person-to-person and calling cards) and offers such digital network services as voice-mail, on-line database access and fax messaging, document sharing functions and video-conferencing for desktop computers.

Ameritech® Automatic Meter Reading Service permits the reading of customers' gas, electric and water meters through existing phone lines. The city of Salem (OH) has a 10-year contract with Ameritech for this service.

Through the Ameritech Packet Switch Network provided by Ameritech Ohio, motor vehicle licensing officials in Ohio can access and update all Ohio drivers' licenses and vehicle registration.

Ameritech provides a range of network consulting, integration and design services to major business, government and institutional customers.

- Ameritech can integrate voice, data, video conferencing and environmental systems, including customer premise equipment, local and long-distance networks and private networks.
- Ameritech provides custom data connectivity solutions to link customers' operations. *Branch Office Data Connectivity* solutions combine ISDN, frame relay, ATM and other communications technologies. Ameritech also provides Internet access.
- During 1994, EDS and Ameritech signed a $225 million, seven-year outsourcing contract under which Ameritech is providing maintenance, repair and upgrades to voice communications systems at more than 300 EDS sites in 41 states.
- Ameritech was awarded a $20 million, five-year contract to maintain Motorola's telecommunications service center.
- Ameritech was awarded a ten-year, $25 million contract with the city of Chicago to support the city's 911 system.
- The State of Michigan has signed a 60-month, $6.3 million master network

© INPUT 1995 Reproduction prohibited.

contract to provide services to state agencies.

- Ameritech will build a six-node, $5.9 million SONET ring to meet Comdisco customers' disaster recovery needs.

- Ameritech will provide the City Colleges of Chicago with videoconferencing capabilities, including a T-1 network encompassing 15 locations with VTEL video equipment and multiple bridges.

Market trials will be conducted on several new products for small businesses in 1995:

- *Voice Calling*, for voice-activated speed dialing

- *Internet Access*, providing small businesses with an Ameritech on-ramp to the Internet.

- *Call Management Reports*, providing customers with call activity data.

Ameritech provides the following services in support of other network and information providers:

- Ameritech provides billing and collection services for several companies, including billing for long-distance services offered by certain long-distance carriers.

- Ameritech's *UltimateLink* program is designed to meet the needs of the long-distance industry for products, high-quality service and competitive prices. Ameritech is investing $200 million in network infrastructure for SONET-based high-speed switched and dedicated service and is targeting 1995 for the introduction of next-generation billing systems and enhanced fraud detection.

- In an alliance with Paradigm Technology Ltd. of New Zealand, Ameritech will be the exclusive marketing and support arm of Transaction Analysis and Processing System (TAPS) for the U.S. telecommunications industry. TAPS is a software product that provides near real-time usage rate calculations while reducing operating costs.

- New products for third-party providers include:

 - *Cellular Alarm Terminals* provide cellular backup to security systems

 - Services provided for Personal Communications networks include both network facilities to support PCS and engineering and consulting services

 - *Control Services Integration* will provide utility customers with control systems that can sense, measure, monitor and control and range of utility functions.

 - *Infochannel* is a multimedia information system used to distribute information to any number of PCs and television units and can be used in hotels, airports, shopping malls and on cable TV channels.

 - *Interactive Services Platforms* are designed for companies that market information services such as 976 numbers and voice messaging services to customers.

Interactive Services

In December 1994, the FCC approved Ameritech's request to begin building a digital video network capable of delivering multicast and interactive services to six million customers by the year 2001.

© INPUT 1995. Reproduction prohibited.

- Ameritech plans to spend $4.4 billion over the next 15 years to build the new network, which will be separate from Ameritech's local communications network. A computer network, fiber-optic and coaxial cable will be used to connect the homes, businesses, libraries and schools in the service territory.

- Ameritech will be only one of many users of the broadband network. A multitude of competing video information providers, businesses, institutions, long-distance carriers and video telephony customers will also have access to the technology. Under FCC's action, Ameritech will act as a common carrier, transmitting programs from all sources will to pay a transmission fee.

Although Federal regulations prevent Ameritech from providing its own programming, the company is pursuing alliances and partnerships that will position it as a key participant in the emerging era of interactive video, exploring a variety of services with different suppliers of traditional cable TV, video-on-demand, home health care, interactive educational courses, distance learning, interactive games and shopping and other entertainment and information services.

- Ameritech has invested in Peapod LP, an interactive home grocery shopping and delivery service. Using a personal computer, more than 11,000 customers in the Chicago and San Francisco areas can choose grocery items and schedule home delivery at their convenience.

- Ameritech and Random House have expanded their ownership of Worldview Systems Corporation, a supplier of electronic travel and entertainment information, forming a joint venture to deliver electronic travel information products and services. Ameritech and Random House each now own more than 40% of Worldview Systems, with the remainder reserved for the firm's management team. The company's first product, Fodor's Worldview Travel Update, offers customers, via fax, on-line information services or mail, time-sensitive destination information that complements Fodor's catalogue of printed guidebooks.

- Ameritech, The Walt Disney Company, Bell South Corporation, SBC Communications (formerly Southwestern Bell Corporation) and GTE have signed a memorandum of understanding that sets forth principles for the formation of a joint venture to develop, market and deliver traditional and interactive video programming to customers. Under the memorandum, the parties are working on a business plan for providing video services to the home.

 - The services could ultimately include existing broadcast and satellite television networks, as well as movies-on-demand, interactive home shopping, educational programs, games, travel assistance and more. The proposed venture would also develop a navigator to allow customers to access theses services.

 - This joint venture—recently named "Americast"—will be headed by Stephen Weiswasser, the newly named CEO, who was formerly with Cap Cities.

- Ameritech's $472.5 million investment in GEIS is in the form of a four-year interest bearing convertible debenture which, if legal restrictions are removed, converts into a 30% equity interest in GEIS.

© INPUT 1995 Reproduction prohibited.

Other information services offered by Ameritech include the following:

- In March 1994, Ameritech announced a joint venture with BC Systems of British Columbia to form CivicLink, which allows on-line access to publicly available government records, such as property titles, court records, liens and construction permits. In late 1994, Ameritech deployed its first CivicLink system, serving Indianapolis and Marion County, Indiana.

- Ameritech process billing and clinical transactions for health care providers through an integrated system of computer software, hardware and telephone lines.

 - Ameritech operates the Wisconsin Health Information Network, the world's largest interactive health care information network, used by more than 1,100 doctors, hospitals, insurers, medical labs and other firms.

 - Ameritech plans to expand health information networks to serve Cleveland, Cincinnati, Nashville and the state of Illinois during 1996.

- Ameritech is a leading provider of library software, serving more than 2,800 libraries throughout 33 countries, including the Library of Congress, the Smithsonian and Time-Warner. Ameritech offers specialized management systems for libraries and provides content and information access to a range of clients.

- Ameritech and Citibank market a smart phone that is used to pay bills, get stock quotes, transfer money between accounts, order travelers checks and review balances.

- Confirm & Pay, launched in late 1994, is designed to allow brokerage firms to meet the Securities and Exchange Commission's new three-day trade settlement requirement (T+3) by confirming and settling trades electronically.

Cellular and Other Wireless Services

Ameritech provides cellular and other wireless communications to customers using Ameritech's 1.6 million cellular lines in Hawaii, Illinois, Indiana, Michigan, Missouri, Ohio and Wisconsin.

- During 1994, Ameritech added 439,000 cellular customers to its base, a record 51% increase over the prior year.

- Subscribers to Ameritech's international wireless joint ventures increased in 1994 to 111,000, more than three times the customer base a year earlier.

- Ameritech has formed strategic cellular partnerships in Poland and Norway and has investments in other cellular providers.

Wireless Packet Data Services, introduced in 1994, provides the mobile data customer with application options to send data over the cellular network.

During 1994, Ameritech became the first cellular carrier in the country to offer its customers the ability to use cellular phones in both North America and Europe. The Ameritech Cellular International Network employs the Global System for Mobile Communications standard.

Ameritech currently provides local and nationwide paging services to customers using approximately 635,000 paging units, a 24% increase over 1993, in Illinois, Indiana,

© INPUT 1995. Reproduction prohibited.

Michigan, Missouri, Minnesota, Ohio and Wisconsin.

- In November 1994, Ameritech won the narrowband personal communications services (PCS) regional license to offer two-way paging in the Midwest.

- Ameritech plans to offer two-way paging and data services to customers in 15 states beginning in 1996. The return paging channel will allow users of two-way pagers to acknowledge a page and, eventually, to provide a detailed response.

Ameritech participated in the FCC's auction of broadband PCS licenses and has won licenses in the Cleveland and Indianapolis major trading areas. The company will pay $158.1 million for these licenses, which cover almost eight million potential customers.

Advertising/Directory Services

Ameritech provides directory and electronic advertising to local, regional and national businesses throughout the Great Lakes region and serves as a director and marketing consultant.

Ameritech publishes more than 450 Ameritech PagesPlus® white and yellow page directories in Indiana, Wisconsin, Ohio and Michigan and, in partnership with Donnelley Directory, in Illinois and northwestern Indiana, with a total distribution of more than 40 million.

Using new audiotex technology, Custom Connect™ audiotex, available 24 hours a day, 7 days a week, provides consumers and advertisers with a range of information opportunities accessible through special phone numbers.

- Consumers can call for up-to-date information including news, sports and weather, as well as information about specific products and services.

- Advertisers can provide consumers with updated messages about their businesses, such as sales, discounts and special hours.

Other products include Ameritech Industrial Purchasing Guides®, targeted to buyers of industrial products and The Ameritech Business Search™ white and yellow page business reference directories, which are also available in CD ROM.

International

Since 1990, Ameritech has invested approximately $1.2 billion in Germany, New Zealand, Hungary, Poland and Norway and has established offices in China, the Czech Republic and Portugal.

In October 1990, Ameritech acquired 90% of "Wer liefert was?" (Who supplies what?), the leading German publisher of business purchasing guides

In September 1990, Ameritech and Bell Atlantic purchased Telecom Corporation of New Zealand Limited, New Zealand's state-owned principal supplier of domestic and international telecommunications services, including local, long-distance, cellular, satellite TV and directory services, to 1.6 million customers. After public offerings and private sales of the stock of New Zealand Telecom required by the government at the time of the acquisition, Ameritech and Bell Atlantic each have a 24.8% interest in the company.

In December 1993, Ameritech and its partner, Deutsche Bundespost Telekom of Germany, Europe's largest communications carrier, invested in MATAV, the Hungarian

© INPUT 1995. Reproduction prohibited.

telecommunications company. Ameritech and Deutsche Telekom have equal ownership totaling approximately 30% of the company.

Since 1992, an Ameritech consortium has operated the Centertel cellular system in Poland. Ameritech and France Telecom, in partnership with Telekomunikacja Polska S.A., Poland's state-owned telephone company, created a joint venture to build the cellular system.

Since September 1993, Ameritech and its partners in NetCom GSM have provided digital cellular service in Norway. In 1992, Ameritech and Singapore Telecom, the government-owned telecommunications and postal operator in Singapore, agreed to acquire an equal interest in NetCom totaling an effective 49.9%.

During 1994, Ameritech announced a Pan-American alliance with six other cellular companies, including Alltel Mobile, BellSouth Mobility, CommNet Cellular, GTE Personal Communications Services, Radiomovil DIPSA S.A. (Telcel, the carrier for the Republic of Mexico) and Southwestern Bell Mobile Systems to provide a virtual international network throughout much of the U.S. and Mexico. While roaming in the markets of the alliance, Ameritech customers receive automatic call delivery, home customer care and competitive roaming rates.

Marketing and Sales

Ameritech markets its products and services through a direct sales force and through other company authorized dealers.

Competition

Ameritech's major competitors are the other Regional Bell Operating Companies.

© INPUT 1995. Reproduction prohibited.

AMERITECH
30 South Wacker Drive
Chicago, IL 60606
(312) 750-5000

William L. Weiss, Chairman and CEO
Robert L. Barnett, Vice Chairman and President, Ameritech Bell Group
Public Corporation, NYSE
A Regional Bell Operating Company
Total Employees: 73,967 (12/91)
Total Revenue, Fiscal Year End 12/31/91: $10,818,400,000

The Company

Ameritech, one of the seven regional telecommunications companies formed by the breakup of the Bell System in 1984, provides communications services to both the commercial and residential markets.

Ameritech's current operations consist of five Bell companies and certain other businesses as follows:

- Ameritech Bell Group consists of:

 - Illinois Bell, Indiana Bell, Michigan Bell, Ohio Bell, and Wisconsin Bell, which provide advanced communications and information services for 12 million consumers and business customers in the Great Lakes region. As of December 31, 1991, the total number of Bell employees was 66,390.

 - Ameritech Services, with 4,000 employees, provides the five Ameritech Bell companies with human resources, technical, marketing, and regulator planning services, as well as purchasing and material management support. This unit also supplies information services to Ameritech's various operating units.

 - Ameritech Information Systems, with 2,000 employees, is the Bell Group sales channel for network services and products to major business, government, and institutional customers; provides telephone systems and other customer premise equipment; and provides systems, consulting, integration, and design services to clients and Ameritech. During 1991, Ameritech Information Systems made two information services acquisitions:

Copyright 1992 by INPUT. Reproduction Prohibited.

- In February 1991, Ameritech acquired Knowledge Data Systems, Inc. of Larkspur (CA) for about $26 million. Knowledge Data, with 90 employees and 1990 revenue of about $12.5 million, provides turnkey systems and services to health care institutions and medical labs.

- In October 1991, Ameritech acquired NOTIS Systems, Inc. of Evanston (IL), a 90-employee company that provides academic library software to public and private universities worldwide.

- Ameritech Mobile Communications, with 1,500 employees, provides wirefree communications, including advanced cellular telephone and paging products and services.

 - In November 1991, Ameritech completed the acquisition of CyberTel Financial Corporation for approximately $500 million. CyberTel provides mobile telephone services in Illinois and Missouri and paging services in Illinois, Minnesota, and Missouri.

- Ameritech Publishing, headquartered in Troy (MI) with nearly 3,000 employees, publishes the Ameritech PagesPlus® directories, as well as other specialty directories and publications.

- Ameritech Audiotex Services, based in Chicago (IL) with 20 employees, provides voice response services to deliver information, promotion, and customer service programs via the telephone.

- The Tigon Corporation, headquartered in Dallas (TX) with 230 employees, provides voice messaging services in the U.S., Australia, Canada, Europe, Japan, and Taiwan directly or through co-marketing agreements.

- Ameritech Credit, with 50 employees, provides financing and leasing of computer hardware and communications products and services for business, government, and institutional customers of the Ameritech companies.

- Ameritech Development, with 70 employees, assists in developing new business ventures and invests in communication and information technologies.

- Ameritech International, formed in May 1990, develops business opportunities for Ameritech outside the U.S.

Copyright 1992 by INPUT. Reproduction Prohibited.

- In May 1991, Ameritech, Bell Atlantic, Time-Warner, and Tele-Communications, Inc. purchased a 51% interest in Sky Network Television, a pay-TV operator in New Zealand.

- During 1991, Ameritech, France Telecom, and the Polish Post Telegraph and Telephone formed a partnership to construct and operate a nationwide cellular system in Poland.

- In September 1990, Ameritech and Bell Atlantic purchased Telecom Corporation of New Zealand for about $2.5 billion. To comply with New Zealand government requirements, Ameritech and Bell Atlantic will reduce their combined ownership of Telecom to 49.9% by September 1992.

 · In July 1991, Ameritech and Bell Atlantic completed a worldwide initial public offering of Telecom stock, reducing their combined ownership to 69%.

 · Ameritech realized net proceeds of $395.5 million and recorded an after-tax gain of $73.6 million.

- Ameritech also has other partnering agreements with Nippon Telegraph and Telephone of Japan, Ktas of Denmark, PTT Telecom BV of the Netherlands, Telefonica of Spain, and ItalCable of Italy.

Ameritech's total 1991 revenue reached $10.8 billion, a 1% increase over 1990 revenue of $10.7 billion.

· Net income of $1.17 billion includes a $141 million after-tax charge for restructuring in the fourth quarter (for the write-down of assets and intangibles related to the company's unregulated operations, charges for work force reductions, and early retirement of debt), and a $73.6 million after-tax gain on the sale of a portion of Ameritech's interest in Telecom.

· A five-year financial summary follows:

Copyright 1992 by INPUT. Reproduction Prohibited.

AMERITECH
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR				
ITEM	1991	1990	1989	1988	1987
Revenue	$10,818.4	$10,662.5	$10,211.3	$9,903.3	$9,547.5
· Percent increase from previous year	1%	4%	3%	4%	2%
Income before taxes	$1,656.4	$1,810.5	$1,784.9	$1,818.6	$1,905.8
· Percent increase (decrease) from previous year	(9%)	1%	(2%)	(5%)	(8%)
Net income	$1,165.5 (a)	$1,253.8	$1,238.2	$1,237.4	$1,188.1
· Percent increase (decrease) from previous year	(7%)	1%	--	4%	4%
Earnings per share	$4.39	$4.73	$4.59	$4.55	$4.24
· Percent increase (decrease) from previous year	(7%)	3%	1%	7%	8%

(a) Includes $141 million in restructuring charges and a gain of $73.6 million from the sale of Telecom Corporation stock.

Ameritech management attributes the increase in revenue to higher revenues generated by the mobile communications, directory publishing, and equipment and information systems operations. The weak economy caused a slower rate of growth in the Ameritech Bell operating companies, further depressed by rate reductions and increased uncollectible revenues.

In November 1991, Ameritech announced plans to invest more than $1.05 billion over the next five years to install 276 digital switching systems and upgrade other existing switches. The company plans to spend about $11 billion in total over the next five years to speed modernization of its telecommunications infrastructure.

Key Products and Services

Approximately 45% of Ameritech's 1991 revenue was derived from local services, 23% from network access charges, and 12% from long distance charges. The remainder of revenue was derived from directory assistance and other services. A three-year source of revenue summary follows:

Copyright 1992 by INPUT. Reproduction Prohibited.

AMERITECH
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	1991		1990		1989	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Local service	$4,886.1	45%	$4,788.8	45%	$4,679.0	46%
Network access						
- Interstate	1,992.6	18%	2,008.8	19%	1,941.4	19%
- Intrastate	556.0	5%	559.1	5%	540.7	5%
Long distance	1,294.1	12%	1,336.3	13%	1,259.3	12%
Directory and other (a)	2,089.6	19%	1,969.5	18%	1790.9	18%
TOTAL	**$10,818.4**	**100%**	**$10,662.5**	**100%**	**$10.211.3**	**100%**

(a) Includes publishing telephone directories, mobile communications, paging services, lease financing, voice mail services, third-party billing and collection services, and telephone equipment sales and installation.

The Ameritech Bell Group contributed approximately $9.6 billion to 1991 revenue.

- Communications and information services provided by the Bell companies include:
 - Usage: IntraLATA, local calls (27% of Bell company revenues)
 - Local access/access lines (26% of Bell company revenues)
 - Switched access: Interstate/intrastate connections to interexchange carriers, cellular providers, and alternative local transport providers (17% of Bell company revenues)
 - Dedicated communications services: Special access, analog/digital private line, OPTINET, custom high-capacity (8% of Bell company revenues)
 - Number services: Directory assistance, information, call completion, call intercept (7% of Bell company revenues)
 - Central office services: Touch-tone, custom calling, advanced custom calling services, caller ID, intelligent network services (5% of Bell company revenues)

Copyright 1992 by INPUT. Reproduction Prohibited.

- Public/Dial O: Coin, semi-public, alternate billed services (4% of Bell company revenues)

- Switched services: Centrex, ISDN, packet services (3% of Bell company revenues)

- Premises services: Inside wire, Line-Backer (2% of Bell company revenues)

- Billing services: Third-party billing services (1% of Bell company revenues)

· Ameritech® Automatic Meter Reading Service permits the reading of customers' gas, electric, and water meters through existing phone lines. The city of Salem (OH) has a 10-year contract with Ohio Bell for this service.

· Through the Ameritech Packet Switch Network provided by Ohio Bell, motor vehicle licensing officials in Ohio can quickly access and update all Ohio drivers' licenses and vehicle registrations.

Ameritech Information Systems provides network management products and services and certain products to the medical and library markets.

· Ameritech Network Management is a series of services that can integrate voice, data, video teleconferencing and environmental systems, including customer premise equipment, local and long-distance networks, and private networks. Clients include Rockwell International (Seal Beach).

· The OPTINET™ service is a family of dedicated private line data services provided by Ameritech to long-distance companies and business customers. OPTINET can link PCs or high-tech workstations to a host computer, connect ATMs, and provide access from remote sites to private corporate networks. Other applications include facsimile transmission, electronic mail, videoconferencing, and international communications.

· The Ameritech Advanced Intelligent Network is being developed to enable customers to choose when and where calls should be directed at any given time, to specify special handling for calls from certain numbers, and to create simplified dialing procedures for employees using in-house telecommunications networks. American Drug Stores and Continental Bank, both of Chicago, are currently testing the service.

Copyright 1992 by INPUT. Reproduction Prohibited.

- Ameritech is designing a hospital-wide network for voice and data, planning the implementation of network applications, and providing project management services for Marquette General Hospital's (Michigan) medical records system.

- The Wisconsin Health Care Information Network provides a systems solution for health care institutions to electronically send and receive patient information through a common user interface.

- Network management software products include:

 - PC-based products: A Windows-based fault management application, an on-line procedural documentation tool, and an expert system-based SNA diagnostic tool

 - UNIX-based products: An SNMP Manager, a Token Ring Manager, and a Call Reporter (all based on a Multiprotocol Network Manager), and a Synchronous Network Advisor

 - Mainframe-based products: Two REXX-based command facilities that allow access to DB2 data bases on-line from TSO or NetView via SQL commands

- Knowledge Data Systems provides Tandem-based turnkey systems, implementation support, and data processing management services for hospitals, health maintenance organizations, private laboratories, and clients.

 - Knowledge Data has five primary products: A patient care system, a clinical laboratory system, a pharmacy management system, an ambulatory care system, and an electronic medical record system (Knowledge Keystone).

 - Knowledge Data markets its products throughout the U.S. and internationally. Major customers include Henry Ford Health System (Detroit), Kaiser Permanente (Oakland, CA), and the University of Minnesota Hospital and Clinics (Minneapolis).

- NOTIS Systems, Inc. provides academic-library software and support services to more than 200 libraries worldwide, including libraries in the U.S., Canada, and New Zealand, as well as the national libraries of Venezuela, Chile, and Colombia.

- In January 1992, Ameritech announced an agreement to acquire Dynix Management, Inc. of Provo (UT). Dynix provides a

Copyright 1992 by INPUT. Reproduction Prohibited.

UNIX-based product set of library automation systems to public libraries of varying size, and to school, academic, and special libraries.

Ameritech Mobile Communications provides wirefree communications, including advanced cellular mobile telephone and paging products and services, serving 23 major markets in a six-state area. In 1991, revenues increased over 16% and as of December 31, 1991 had 483,000 cellular customers and 319,000 paging customers.

- Ameritech Mobile does business through wholly owned subsidiaries that are either general or limited partners of partnerships that hold FCC licenses and provide mobile communications services in the licensed service areas, or directly hold such licenses and provide such service.

- Mobile Access Data Service™ enables customers to use their car or briefcase cellular phones in conjunction with lap-top computers to access any computer in the U.S. reachable through a local or 800 number.

- Fast Track® allows customers to be contacted in any of 200 cities in the U.S. and Canada by dialing the local cellular phone number.

- Mobile Message Service™ is a voice mail service for cellular phones.

- Smart Call™ permits direct access to traffic reports, weather conditions, sporting events, and stock market information.

- Roam America™ allows users to make and receive calls nationwide.

- Priority Message Service™ combines mobile phone services with a pager.

Ameritech Audiotex Services provides regional and local 976, 900, and 800 voice response services.

- The company was restructured during 1991 to reduce costs and integrate the marketing focus into Ameritech's regional market strategy.

- Advanced features and functionality added during 1991 include custom intercept capabilities, credit card verification, enhanced interactive voice record, and external data base access.

Copyright 1992 by INPUT. Reproduction Prohibited.

The Tigon Corporation operates the world's largest voice messaging network, with voice messaging service bureaus in all major markets throughout the U.S. and international partnerships in Canada, France, Germany, Italy, the Netherlands, Spain, Sweden, Switzerland, the U.K., Japan, and Taiwan.

- Services include two-way voice messaging, integrated services (integration with PBX or Centrex for call answering with message waiting indication and personalized greeting), TigonANSWER (call answering with personalized greeting via direct inward dial line), national message center, and TigonINFORM (verbal bulletin board).

- The acquisition of GTE TeleMessager's voice messaging operations in January 1991 expanded Tigon's operations by 20%.

Ameritech Publishing restructured during 1991 to focus on product quality and growing the core consumer and commercial segments. Ameritech Publishing's 1991 revenues rose 4.7% over 1990 levels.

- Total directory circulation for the year reached about 44 million copies.

- The primary product is PagesPlus® yellow pages directories published in Indiana, Michigan, Ohio, and Wisconsin.

- Touch Four™ is an audiotex service that stores and retrieves recorded information via touch-tone telephone. It is marketed to advertisers and users of PagesPlus.

Industry Markets

Ameritech's revenues are derived cross-industry, including residential and business.

Geographic Markets

Approximately 99% of Ameritech's 1991 revenue was derived from the U.S.

Ameritech's Bell companies primarily serve clients within the states of Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Tigon's services are provided worldwide.

Ameritech Audiotex Services are provided within Ameritech's five-state region.

Ameritech Publishing provides directories for the Eastern U.S., Austria, Germany, and Switzerland.

Copyright 1992 by INPUT. Reproduction Prohibited.

Computer Hardware and Software

Ameritech is in the process of consolidating its 11 data centers to four. The centers, to be located in Illinois, Wisconsin, Michigan, and Ohio, have a range of hardware installed in support of both internal operations and services provided to customers.

Copyright 1992 by INPUT. Reproduction Prohibited.

AMERITECH (AMERICAN INFORMATION TECHNOLOGIES CORPORATION)
30 South Wacker Drive
Chicago, IL 60606
(312) 750-5000

William L. Weiss, Chairman and CEO
Robert L. Barnett, President, Ameritech Enterprise Group
Ormand J. Wade, President, Ameritech Bell Group
Public Corporation
A Regional Bell Operating Company
Total Employees: 77,904 (3/31/89)
Total Revenue, Fiscal Year End 12/31/88: $9,903,300,000

The Company

Ameritech, one of the seven regional telecommunications companies formed by the breakup of the Bell System in 1984, provides communications services to both the commercial and residential markets.

In September 1988, Ameritech Enterprise Group sold Applied Data Research (ADR) to Computer Associates International Inc. for $170 million, 21% less than its purchase price of $215 million in January 1986.

- ADR develops and markets systems software products for the IBM mainframe environment.

In December 1988, Ameritech formed Ameritech Enterprise as a holding company for information service businesses within the Ameritech Enterprise Group. Businesses in this unit include the following:

- The Tigon Group, purchased in October 1988, is a leader in the rapidly expanding voice messaging market. Tigon will market Ameritech voice messaging products in major metropolitan areas as well as the U.K. and Japan through co-marketing agreements.

- In September 1988, Ameritech Development Corp. acquired the Midwest operations of Telephone Announcement Systems Inc. (TAS), a unit of Marlton (NJ)-based Audio Information Sciences Inc.

 - Operating as Ameritech Audiotex Services, the company will offer information gateway products. The Ameritech

Copyright 1989 by INPUT. Reproduction Prohibited.

audiotex gateway will provide callers with access to a wide range of information on such subjects as sports, entertainment, finance, and real estate by dialing one number on a touch-tone phone.

Ameritech's total 1988 revenue reached $9.9 billion, a 4% increase over 1987 revenue of $9.5 billion. Net income also rose 4% from $1.19 billion in 1987 to $1.24 billion in 1988. A five-year financial summary follows:

AMERITECH
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR				
ITEM	1988	1987	1986	1985	1984
Revenue	$9,903.3	$9,547.5	$9,384.8	$9,058.4	$8,377.6
• Percent increase from previous year	4%	2%	4%	8%	(a)
Income (loss) before taxes	$1,818.6	$1,905.8	$2,067.8	$1,897.4	$1,776.0
• Percent increase (decrease) from previous year	(5%)	(8%)	9%	7%	(a)
Net income	$1,237.4	$1,188.1	$1,138.4	$1,077.7	$990.6
• Percent increase from previous year	4%	4%	6%	9%	(a)
Earnings per share (b)	$4.55	$4.24	$3.94	$3.67	$3.39
• Percent increase from previous year	7%	8%	7%	8%	(a)

(a) Pre-divestiture combined data for 1983 for the Ameritech Bell companies has been omitted since it is not comparable to the post-divestiture consolidated operations.

(b) Restated to reflect a two-for-one stock split effective December 30, 1988.

Ameritech management attributes the increase in revenue to higher local, interstate access and long distance calling volumes, revenue requirements of the FCC mandated accounting changes, and growth in the Ameritech Enterprise Group. High demand for yellow page advertising and cellular telephone service also contributed to the increase of revenues for the Ameritech Enterprise Group.

Copyright 1989 by INPUT. Reproduction Prohibited.

Ameritech conducts its business through two groups and their subsidiaries as follows:

- The Bell Group, consisting of:
 - Illinois Bell, Indiana Bell, Michigan Bell, Ohio Bell, and Wisconsin Bell, which provide advanced communications and information services for business and residential customers in the Great Lakes region. These units had 71,945 employees at the end of 1988, and contributed approximately 90% to Ameritech's total 1988 revenue.
 - Ameritech Applied Technologies, created in early 1988, which provides integrated information and communications systems for all Ameritech companies.
 - Ameritech Information Systems, formed by merging the sales forces of the Bell company communications subsidiaries and Ameritech Communications, which provides networking products and services, telephone equipment, and systems solutions to meet the communications and information needs of the top 10,000 major business customers.
 - Ameritech Services, which provides marketing, technical, and regulatory planning; new product development; and purchasing and material management support for the Ameritech Bell companies.
- The Enterprise Group, consisting of:
 - Ameritech Credit, which arranges financing for companies that lease communications products and services through Ameritech Bell companies and Ameritech Information Systems.
 - Ameritech Mobile Communications, which provides wirefree communications, including advanced cellular telephone and paging products and services.
 - In March 1988, Ameritech Mobile sold its 17% interest in Cantel, a Canadian cellular licensee to Rogers Communications for $85 million.
 - Ameritech Mobile made the following acquisitions in 1988:

 The paging service assets of A Beeper Company Associates in Wisconsin and Michigan.

Copyright 1989 by INPUT. Reproduction Prohibited.

The paging service assets of Multicom, Inc. in Illinois and Ohio.

Metrocom, Inc., its largest cellular telephone agent in the Chicago area. Metrocom also sells and services two-way radios, closed circuit television equipment and paging systems.

The assets of King, Netcall and TAS Communications in Michigan.

- Ameritech Publishing publishes the Ameritech PagesPlus[R] directories, as well as other specialty directories, and publications.

Key Products and Services

Approximately 46% of Ameritech's 1988 revenue was derived from local services, 26% from network access charges, 12% from long distance charges, and the remaining 16% from directory assistance and other services. A three-year source of revenue summary follows:

AMERITECH
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	1988		1987		1986	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Local service	$4,521.4	46%	$4,494.1	47%	$4,490.7	48%
Network access						
• Interstate	$1,957.9	20%	$1,797.5	19%	$1,881.4	20%
• Intrastate	$583.3	6%	$573.0	6%	$605.6	6%
Long distance	$1,239.8	12%	$1,149.2	12%	$1,092.7	12%
Directory and other	$1,600.9	16%	$1,533.7	16%	$1,314.4	14%
TOTAL	**$9,903.3**	**100%**	**$9,547.5**	**100%**	**$9,384.8**	**100%**

In 1988, Ameritech had 15,469 customer lines, a 2% increase over the 15,094 customer lines in 1987.

Copyright 1989 by INPUT. Reproduction Prohibited.

Approximately 19% of Ameritech's total 1988 revenue was derived from AT&T, compared to 20% of 1987 revenue, and 21% of 1986 revenue. Services consist primarily of interstate network access and billing and collection service revenues.

The Ameritech Bell Group contributed approximately $9 billion to 1988 revenue. Customer lines grew 2.5% in 1988, over the 2.3% growth in 1987. Total network usage increased 15.6% in 1988.

- Custom Local Area Signaling Services allow users to screen and manage incoming and outgoing calls by using automatic call-back and repeat dialing.
- Ameritech[R] CATV Order Entry Service enables pay-per-view customers to order programs by dialing the cable operator with a seven- or ten-digit number. This service is offered in Michigan, Ohio, and Wisconsin.
- Ameritech[R] Automatic Meter Reading Service permits the reading of a customers' gas, electric, and water meters through the existing phone lines.
- The Ameritech Central Office Information Manager enables customers to install, maintain, and expand their networks by linking communications systems and computers over telephone lines.
- The Ameritech[R] Service Management System allows customers to place orders, make trouble reports, receive measurement reports, and conduct Centrex rearrangements through a menu-driven company network management information system.
- The Ameritech[R] Integrated Digital Network is Ameritech's offering of ISDN (Integrated Services Digital Network). ISDN is a service that permits simultaneous transmission of voice, data, and video communications.
- Major 1988 contracts by the Ameritech Bell Group include:
 - A reservations system for the Knights Inn hotel chain developed by Ohio Bell Communications.
 - A 9,500-line ISDN system provided by Illinois Bell for Bell Laboratories.
 - A $108 million voice and data communications network linking state agencies to state government locations

Copyright 1989 by INPUT. Reproduction Prohibited.

throughout Illinois. Illinois Bell and US Sprint are co-bidders on the project.

- Michigan Bell provided advanced telecommunications services to St. Lawrence Hospital. Features include the ability to use its telephone system to access patient information from a mainframe, answer calls for associated facilities, and provide voice mail services.

- Indiana Bell has contracted to provide the State of Indiana with a 7,000-line Ameritech[R] Integrated Information Network. The network will link state agencies to facilitate the exchange of information between the many locations.

The Ameritech Enterprise Group contributed combined revenues of $945.2 million in 1988.

- Ameritech Credit financed more than $65 million worth of equipment and systems leased by 1,200 customers in 1988.

 - Financing arrangements in 1988 included:

 - A 9,000-line Ameritech[R] Integrated Information Network for Abbott Laboratories.

 - A 1,900-line Ameritech Integrated Information Network for Indiana National Corporation.

 - A 1,370-line Ameritech[R] Centrex system for Bronson Hospital.

 - A 4,100-line Ameritech Integrated Information Network for Cleveland Electric Illuminating.

 - Three new PBXs as well as a sale leaseback and expansion of an existing PBX for Dean Medical Center.

- Ameritech Mobile Communications, Inc. first became profitable in 1987. In 1988, revenues grew 51% over those of 1987 and customer growth was 68%.

 - Ameritech Mobile provides cellular service and products in Chicago, Cincinnati, Columbus, Dayton, Detroit, Flint, Gary-Hammond, Madison, and Milwaukee.

 - In 1987, Ameritech Mobile introduced Mobile Access Data Service[TM], which enables customers to use their car or briefcase cellular phones in conjunction with lap-top

Copyright 1989 by INPUT. Reproduction Prohibited.

computers to access any computer in the U.S. reachable through a local or 800 number.

- The following products were introduced by Ameritech Mobile in 1988:
 - Ameritech Fast Track Service™ customers to be contacted in any of 200 cities in the U.S. and Canada by dialing the local cellular phone number.
 - Ameritech® Mobile Message Service is a voice mail service for cellular phones.
 - Ameritech Smart Call™ permits direct access to traffic reports, weather conditions, sporting events, and stock market information.

- Ameritech Publishing's 1988 revenues rose 13% over 1987 revenues.
 - Ameritech Publishing distributed 41 million copies of approximately 450 Ameritech PagesPlus® directories and Ameritech specialty directories in 1988.
 - The Ameritech PagesPlus Video® was introduced on an experimental basis in 1987. The service uses free-standing kiosks that display information on restaurants, shops, entertainment, sports, museums, hotels, and transportation when the key pad is touched. The machines may be equipped with printers to provide a hard copy of the information.
 - The first Ameritech® Industrial Yellow Pages directory outside the Ameritech region was distributed in 1987. It covers Pennsylvania, New England, New York, and northern New Jersey. New directories were added in 1988 for southern California and the Carolinas.
 - Ameritech Publishing has also made CitySource English-language directories available in Tokyo and Osaka (Japan).

Industry Markets

Ameritech's revenues are derived cross-industry, including residential and business.

Ameritech Mobile markets its cellular products and services through several retail chains: Tandy/Radio Shack, Fretter

Copyright 1989 by INPUT. Reproduction Prohibited.

Appliances, Highland Superstores, K's Merchandise, Sun TV & Appliance, and Swallen's.

Clients include the State of Illinois, St. Lawrence Hospital, American Can Company, the Medical College of Wisconsin, AmeriTrust Bank, and Children's Hospital of Wisconsin.

Geographic Markets

Ameritech serves clients within the states of Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Computer Hardware and Software

Ameritech has a wide variety of hardware in support of its internal operations, ranging from microcomputers to mainframes. Software applications are used in nearly every aspect of its business, from word processing and spreadsheets to telephone billing systems.

Copyright 1989 by INPUT. Reproduction Prohibited.

AMHERST ASSOCIATES
20 North Clark Street
Chicago, IL 60602
(312) 346-0900

Frank Amato, Chairman
M. King Deets, President
Private Corporation
Total Employees: 250
Total Revenue, Fiscal Year
End 12/31/81: $21,000,000
Total Computer Services
Revenue: $11,760,000

THE COMPANY

- Amherst Associates, founded in 1970, provides computerized planning, financial modeling, and management consulting for the hospital industry. Remote computing services have been offered since 1976.

- Revenue for 1981 was $21 million, a 50% increase from $14 million in 1980. A five-year summary follows:

AMHERST ASSOCIATES
FIVE-YEAR FINANCIAL SUMMARY
($ thousands)

ITEM \ FISCAL YEAR	1981	1980	1979	1978	1977
Total revenue	$21,000	$14,000	$10,000	$ 7,000	$ 1,500
. Percent increase from previous year	50%	40%	43%	367%	31%

- Amherst has two operating units, Computer Services and Consulting Services.

- Employees are segmented as follows:

Marketing/sales	10
Remote computing customer support	45
Computer operations	60
Management consultants	50
Consultant support	10
General and administrative	75
	250

©1982 by INPUT. Reproduction Prohibited.

KEY PRODUCTS AND SERVICES

- In 1981 processing services accounted for 56% of revenue and management consulting contributed 44%.

- On its remote computing network, Amherst offers hospital clients several management planning programs. All applications software was developed by Amherst.

 - Ninety percent of the company's processing is interactive and 10% is batch.

- Amherst's primary application is the Hospital System Library (HSL), a financial modeling system.

 - HSL can be used for budgeting, forecasting, rate setting, financial monitoring and control, "what if" modeling, cost reporting, reimbursement, and many other functions.

 - HSL creates a hospital data base which the client can manipulate to generate a wide variety of reports, graphs, and tables.

 - As of January 1982, HSL had 250 users.

- Medical Staff Analysis (MEDSTAFF) provides information on a hospital's physicians.

 - MEDSTAFF can generate more than three dozen different tables to profile physicians by position, board certification, age, affiliation with other hospitals, among others.

 - Admitting patterns can also be analyzed by this program.

 - MEDSTAFF has 10 users.

- Payroll Budgeting and Simulation (PAYSIM) assists the hospital in preparing staffing plans and developing payroll budgets. It includes simulation capabilities to determine the financial impact of alternative assumptions.

 - PAYSIM has 40 users.

- Amherst Multi-Year Model (AMY) is a long-range planning model used to provide detailed projections of operating performance for up to 10 years.

 - Financial information is supplied for:

 . Strategic long-range plan development.
 . Certificate of need applications.
 . Financial feasibility analysis.
 . Economic impact assessment.

©1982 by INPUT. Reproduction Prohibited.

- AMY has 25 users.

- Diagnostic Related Group (DRG) is a program offered to hospitals in New Jersey. It assists them in managing under that state's DRG system of reimbursement.
 - DRG has 15 users.

- Procedural Rate Setting (PRS) is Amherst's newest model, introduced in December 1981.
 - It is a tool for determining optimal pricing structure, by evaluating the effects of price changes and/or utilization patterns, at the procedural level.
 - Procedural rate setting has six users, to date.

- Amherst claims to be the largest management consulting firm in the United States specializing in the health care industry.
 - Management consulting is provided in the following areas:
 - Strategic planning.
 - Feasibility studies.
 - Corporate restructuring.
 - Certificates of need.
 - Organization structure.
 - Mergers/acquisitions.
 - Long-term financial planning.
 - Information systems.

INDUSTRY MARKETS

- The health care industry accounts for 100% of Amherst's revenue.

GEOGRAPHIC MARKETS

- Amherst serves clients in the United States from seven regional offices in Amherst (MA), Atlanta (GA), Chicago (IL), Dallas (TX), Los Angeles (CA), New York (NY), San Francisco (CA).

COMPUTER HARDWARE AND SOFTWARE

- The data center, located in Amherst (MA), is accessed via Tymnet and Telenet.

- Client processing is done on a DEC VAX; smaller DEC PDPs are used for internal operations.

©1982 by INPUT. Reproduction Prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

March 1996

Anacomp, Inc.

Chairman: Paul G. Roland
President & CEO: Lang Lowrey III
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
Phone: (317) 844-9666
Fax: (317) 848-1360

Status:	Public
Employees:	3,600 (10/95)
Revenue:	$591,189,000
Fiscal Year End:	9/30/95

Key Points

- Anacomp is a leading provider of computer output microfilm (COM) micrographics products and services worldwide.
- The company has recently been involved in financial restructuring, including filing Chapter 11 status, as a result of defaults on most of its debt agreements due to cash shortages. The company has also announced a five-year business plan to return the company to profitability.
- In September 1995, Anacomp named Lang Lowrey, the company's president and COO, as Anacomp's new CEO. By mutual agreement, former CEO Louis P. Ferrero left the company effective October 1, 1995.
- In November 1995, Anacomp sold its non-core source document services business for $13.5 million, providing Anacomp with about $12.7 million in debt reduction.

Company Description

Anacomp, founded in 1968, provides COM processing (micrographics services) to more than 8,000 customers through its 45 data service centers nationwide.

© INPUT 1996. Reproduction prohibited.

Other products and services provided by Anacomp, which represented 78% of revenue during fiscal 1995, include micrographics systems (the XFP 2000 COM recorder) for users who perform their own data conversions; consumable supplies and equipment for micrographics systems; maintenance services for micrographics equipment; and magnetics storage products, including open reel tape, 3480 tape cartridges and 3490E tape cartridges.

As a result of a withdrawn public offering to refinance certain debts and weaker-than-anticipated results during the second quarter of fiscal 1995, Anacomp did not have sufficient cash to make scheduled principal and interest payments.

- Since May 1995, Anacomp has been continuously engaged in efforts to formulate a restructuring plan to satisfy its various creditors, including developing a new business plan.
- In February 1996, Anacomp announced it had reached agreements with all of its major creditors on a financial restructuring plan to enable Anacomp to emerge from Chapter 11 proceedings filed in January 1996.
- The agreement reduces Anacomp's current debt and accrued unpaid interest and dividends of approximately $454.4 million (including preferred stock) by approximately $179.9 million.
- During this process, Anacomp's business operations will continue as normal.

Company Strategy

As part of its recent restructuring, Anacomp management undertook a planning process to transform Anacomp into a cash-driven business focused on its balance sheet and debt-to-equity ratio. The company has adopted a five-year plan that focuses on:

- Reducing costs by centralizing administrative functions, merging numerous data service centers and offices, and reducing headcount
- Outsourcing or exiting low-margin, non-strategic businesses
- Investing in high-margin products and services that are complementary to the company's core micrographics business

This new plan has resulted in:

- The sale of the Image Conversion Division
- Closure of the Omaha (NE) factory that produced the magnetic media for flexible diskettes
- Discontinued manufacturing of readers and reader/printers
- A company-wide reduction in work force

Anacomp's objective is to protect its highly profitable COM services business, while introducing complementary high-growth services such as compact-disc recordable (CD-R) output, print and mail and archiving. Pursuant to this strategy, Anacomp envisions selling each image it processes up to four times:

- Once to output the image to microfilm or microfiche for safe, long-term storage
- Once to output the image to CD-R for short-term storage and frequent retrieval
- Once to output the image to paper to be mailed directly to the client's customers

© INPUT 1996. Reproduction prohibited.

- Once to store the image for a customer at an Anacomp site for archival purposes

To combat declining prices due to competitive market conditions, Anacomp has installed its XFP 2000 COM systems in all of its data centers, increasing the efficiency of COM production. Additionally, Anacomp will upgrade these systems with Anacomp-developed emulation software for IBM and Xerox laser print streams, which expand the potential market for COM services and command higher average prices than other COM output.

Financials

Anacomp's total fiscal 1995 revenue was $591.2 million, down slightly from fiscal 1994 revenue of $592.6 million.

- Net losses of $238.3 million include $136.9 million of special charges (representing a $108.0 million write-off of good will and $28.9 million of costs associated with previous software investments), $32.7 million in restructuring charges and a one-time $29.0 million deferred tax provision.

- Fiscal 1995 operating income before these charges was $41.4 million, compared to operating income of $79.6 million in fiscal 1994. The decrease is largely attributed to lower micrographics margins as a result of lower selling prices; a decline in COM system and supplies sales; higher selling, general and administrative costs; and a change in product mix as relatively less profitable magnetics products represented a greater portion of total sales.

- A five-year financial summary in shown on the following page.

Micrographics services revenue, which accounted for 22% of Anacomp's revenue in fiscal 1995, was level compared to fiscal 1994, despite a 10% increase in volume.

- Approximately 3% of the volume increase was due to the acquisition of the COM services customer base of 14 data service centers of National Business Systems, Inc.

- COM service revenue was adversely affected by a decline in average selling prices reflecting a continuation of market price erosion that Anacomp expects to continue.

Revenue Analysis by Product/Service

Approximately 22% of Anacomp's fiscal 1995 revenue was derived from micrographic services and 78% from other sources.

A three-year summary of source of revenue by product/service appears on the following page.

© INPUT 1996. Reproduction prohibited.

Anacomp, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

Item	Fiscal Year 9/95	9/94	9/93	9/92	9/91
Revenue	$591.2	$592.6	$590.2	$628.9	$635.4
• Percent change from previous year	--	--	(6%)	(1%)	(3%)
Income (loss) before taxes and extraordinary items	$(203.3) (a)	$15.4	$20.5	N/A	N/A
• Percent change from previous year	N/A	(25%)	N/A	N/A	N/A
Net income (loss)	$(238.3)	$15.0 (b)	$18.6 (c)	$26.9 (c)	$29.2 (c)
• Percent change from previous year	N/A	(19%)	(31%)	(8%)	204%
Earnings (loss) per share	$(5.20)	$0.27 (b)	$0.39	$0.58	$0.64
• Percent change from previous year	N/A	(31%)	(33%)	9%)	220%

(a) Includes special charges of $136.9 million related to a write-off of good will for software investments, a $29.0 million deferred tax provision and $32.7 million in restructuring charges.

(b) Includes a positive cumulative effect of $8 million from a change in the method of accounting for income taxes.

(c) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $6.9 million, $8.7 million and $11.1 million for fiscal 1993, 1992, and 1991, respectively.

Anacomp, Inc.
Three-Year Source of Revenue Summary
($ Millions)

Product/Service	Fiscal Year 9/95 Revenue $	9/95 Percent of Total	9/94 Revenue $	9/94 Percent of Total	9/93 Revenue $	9/93 Percent of Total
Micrographics						
- Micrographics services	$132.3	22%	$131.1	22%	$125.2	21%
- Micrographics supplies, readers and readers/printers	190.6	32%	204.5	35%	223.1	38%
- Maintenance services	85.7	15%	89.9	15%	86.8	15%
- COM systems	51.8	9%	58.8	10%	75.9	13%
Magnetics	128.4	22%	98.8	17%	72.7	12%
Other	2.4	--	8.5	1%	6.5	1%
Total	$591.2	100%	$592.6	100%	$590.2	100%

© INPUT 1996. Reproduction prohibited.

Market Financials

Anacomp's micrographics services customers include a majority of the Fortune 500 companies, banks, insurance companies, financial services companies, retailers, health care providers and government agencies.

Geographic Markets

Approximately 68% of Anacomp's total fiscal 1995 revenue was derived from the U.S. and 32% from international operations.

- One hundred percent of Anacomp's micrographics revenue is derived from the U.S.

- Anacomp's foreign revenue is derived from micrographics supplies, COM systems, maintenance and computer tape and other magnetic products, primarily in the U.K., Germany, France, Canada and the Benelux countries.

Acquisitions

Anacomp has successfully acquired independent computer output microfilm (COM) data service centers located in attractive markets. Anacomp has acquired 26 service centers and one microforms service center during the past three fiscal years.

During fiscal 1994, Anacomp acquired 16 data service centers or the related customer base (all were incorporated with existing Anacomp service centers), a computer tape products company and the customer base of a micrographics supplies business for a total consideration of approximately $39.1 million.

- Effective January 1994, Anacomp purchased the COM services customer base of 14 data service centers operated by National Business Systems for approximately $14.8 million in cash and Anacomp common stock. All of these operations were incorporated into existing Anacomp data service centers.

- In December 1993, Anacomp acquired two data service centers from First Image Management Company (a unit of First Financial Management Corporation) in markets where Anacomp provides COM services to separate customer bases. These operations were incorporated into existing Anacomp data service centers.

- In May 1994, Anacomp acquired Graham Acquisition Corporation, a computer tape products company, for approximately $19.5 million.

No acquisitions were made during fiscal 1995.

Divestitures

In November 1995, Anacomp sold its Image Conversion Services (ICS) division to Image Conversion Systems, Inc. for approximately $13.5 million.

- The ICS division performed source document microfilm services to approximately 800 customers through 11 centers nationwide. ICS had approximately 300 employees and generated revenue of $21.5 million in fiscal 1995.

- The purchaser, Image Conversion Systems, is a corporation formed by John Messinger, formerly an Anacomp vice president in charge of the ICS division, and Horizon Partners, Ltd., an equity investor.

© INPUT 1996. Reproduction prohibited.

- Anacomp had determined that ICS was not strategic to the company's new direction. The sale of this division provided Anacomp with approximately $12.7 million in debt reduction, enables Anacomp to continue marketing these services to its clients, and provides the company with new revenue through the sale of products and services and the leasing of existing space to Image Conversion Systems.

Key Products and Services

One hundred percent of Anacomp's $132.3 million in micrographics services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to more than 8,000 customers nationwide through 45 data centers.

- COM services include the transfer of output directly from magnetic tapes or direct computer transmissions to microfiche or roll microfilm.

- Value-added services provided by Anacomp include Anatrieve customized indexing and retrieval software.

- The typical service contract is exclusive, lasts one year with a one-year automatic renewal period and provides for usage-based monthly fees, subject to increase on 30 days' notice.

- Approximately 75% of Anacomp's micrographics services customers are subject to contracts and more than 95% of such contracts are renewed annually.

In the future, Anacomp plans to generate add-on revenue from various additional customer services, including the following:

- With CD-R services, Anacomp outputs the customer's data from magnetic tape or computer file to a recordable compact disc. For most CD-R customers, Anacomp simultaneously records their data onto microfilm or microfiche. This service was introduced at a selected number of its U.S. data centers in fiscal 1995 and will be expanded during 1996.

- Print and mail services involve outputting customer data to paper, usually on preprinted forms, then mailing the printed information directly to the customer's clients.

- Anacomp will also introduce archival services, which involve storing the customer's images at an Anacomp facility.

Anacomp also offers external facilities management (XFM) services. Anacomp sells an XFP system to a customer, who then pays Anacomp to operate and manage the customer's COM output. Anacomp charges the customer monthly fees based on the volume of COM products produced and also receives additional income from supplies and maintenance charges.

Clients

Major clients include Automatic Data Processing, Citicorp, Electronic Data Systems, General Electric Capital Corporation, The Home Depot and IBM.

Marketing and Sales

Anacomp maintains three separate domestic sales forces:

- The U.S. Group is comprised of 10 regions responsible for sales of micrographics and CD-R services, COM systems and related maintenance services, supplies and

© INPUT 1996. Reproduction prohibited.

equipment, sales of digital products, and direct sales of magnetics products.

- The Strategic Partners Group is responsible for sales to competitive service bureaus and government agencies, as well as spearheading the company's new telemarketing efforts.
- The Magnetics Division is responsible for sales of magnetics products to dealers and distributors.

Competitors

Anacomp's COM information services competitors include First Image (which has 66 data service centers) and hundreds of small, local service bureaus.

© INPUT 1996 Reproduction prohibited.

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

January 1995

Anacomp, Inc.

Chairman & CEO: Louis P. Ferrero
President & COO: J. Mark Woods
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
Phone: (317) 844-9666
Fax: (317) 848-1360

Status:	Public
Employees:	4,400 (10/94)
Revenue:	$ 592,599,000
Fiscal Year End:	9/30/94

Key Points

- Anacomp is the largest micrographics company in the world.
- Anacomp continues to successfully acquire independent computer output microfilm (COM) data service centers located in attractive markets. The company has acquired 24 service centers and one microforms service center during the past three fiscal years.
- Effective January 1994, Anacomp acquired the COM services customer base of 14 data service centers from National Business Systems, Inc.
- In October 1994, Anacomp established Image Conversion Services as a separate division, providing data and image conversion (microforms) services.
- In October 1994, Anacomp reorganized its domestic sales force, merging its micrographics data service centers, COM systems and direct channel supplies sale organizations into two direct sales divisions covering the western and eastern sections of the U.S.
- Despite the recession, Anacomp continues to generate strong cash flow and has reduced its borrowed debt from $586 million in 1989 to $27 million at the end of fiscal 1994.

© INPUT 1995 Reproduction prohibited.

Company Description

Anacomp, founded in 1968, provides COM processing (micrographics services) to more than 8,000 customers nationwide.

Other services provided by Anacomp, which represented 78% of revenue during fiscal 1994, include COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies and computer tape products.

Company Strategy

By providing a full range of COM services, including COM processing, hardware systems, maintenance and supplies, Anacomp can customize its offerings to meet the specific needs of any customer.

Anacomp has been successful in acquiring independent computer output microfilm (COM) data service centers and consolidating these operations with its existing network where appropriate. Such acquisitions have resulted in additional volumes being serviced by Anacomp's existing facilities, thereby improving operating margins while maintaining competitive prices.

Anacomp continues to enhance its XFP 2000 COM recorder system, which permits graphic as well as alphanumeric reproduction of information. Sales of XFPs were 187 units in fiscal 1994, compared to 293 units in fiscal 1993.

- Once a customer purchases COM hardware, Anacomp has the opportunity to provide maintenance services and sell add-on hardware and supplies.
- Anacomp estimates that each dollar of COM system sales generates $0.36 of annual supply revenue and $0.14 of annual maintenance revenue.

Financials

Anacomp's total fiscal 1994 revenue was $592.6 million, up slightly from fiscal 1993 revenue of $590.2 million. Net income of $15.0 for fiscal 1994 includes an $8 million positive cumulative effect on prior years for a change in the method of accounting for income taxes.

Acquisitions made during fiscal 1994 contributed $31.5 million to Anacomp's fiscal 1994 revenue.

- The acquisition of the COM services customer base from National Business Systems contributed $9.1 million to Anacomp's fiscal 1994 revenue. The acquisition of Graham Acquisition Corporation, a manufacturer of computer tape cartridges and open reel tape, contributed $22.4 million to fiscal 1994 revenue.
- Excluding the contributions from these two acquisitions, fiscal 1994 revenues decreased $29.1 million from fiscal 1993 principally due to decreased sales of COM systems, duplicate film and retrieval devices.
- A five-year financial summary follows:

© INPUT 1995. Reproduction prohibited.

Anacomp, Inc.
Five-Year Financial Summary
($ Millions, except per share data)

Item	Fiscal Year				
	9/94	9/93	9/92	9/91	9/90
Revenue	$592.6	$590.2	$628.9	$635.4	$652.2
• Percent change from previous year	--	(6%)	(1%)	(3%)	5%
Income from continuing operations before taxes	$16.9	$22.9	$35.3	$33.5	$17.4
• Percent change from previous year	(26%)	(35%)	5%	93%	(37%)
Net income	$15.0	$18.6	$26.9	$29.2	$9.6
• Percent change from previous year	(a)(b) (19%)	(b)(c) (31%)	(b)(c) (8%)	(b)(c) 204%	(b)(c) 106%
Earnings per share	$0.27	$0.39	$0.58	$0.64	$0.20
• Percent change from previous year	(31%)	(b) (33%)	(b) (9%)	(b) 220%	(b) 104%

(a) Includes a positive cumulative effect of $8 million from a change in the method of accounting for income taxes.

(b) Includes net losses of $841,000 ($0.02 per share) in fiscal 1994, $1.3 million ($0.04 per share) in fiscal 1993, $1.6 million ($0.04 per share) in fiscal 1992, $1.6 million ($0.04 per share) in fiscal 1991 and $2.1 million ($0.05 per share) in fiscal 1990 from discontinued operations.

(c) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $6.9 million, $8.7 million, $11.1 million and $5.7 million for fiscal 1993, 1992, 1991 and 1990, respectively.

Micrographics services revenue increased 5% during fiscal 1994, decreased 2% in fiscal 1993 and increased 6% in fiscal 1992. Volume increases were 10%, 13% and 14% in fiscal 1994, 1993 and 1992, respectively.

- The increase in fiscal 1994 was due to the acquisition of the COM services customer base of National Business Systems.

- The revenue decline in fiscal 1993 was due to the absence of certain government contracts that expired in 1992 and were not replaced, as well as reduced prices.

- The volume growth is split between new customers and increased services to existing customers.

Revenue Analysis by Product/Service:

A three-year summary of source of revenue by product/service appears on the following page.

© INPUT 1995 Reproduction prohibited.

Anacomp, Inc.
Three-Year Source of Revenue Summary
($ Millions)

	Fiscal Year					
	9/94		9/93		9/92	
Product/Service	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Micrographics services	$131.7	22%	$125.2	21%	$127.9	20%
Micrographics supplies, readers and readers/printers	204.6	35%	223.1	38%	237.3	38%
Maintenance services	89.9	15%	86.8	15%	91.6	15%
COM systems	59.1	10%	75.9	13%	76.8	12%
Computer tape products	74.7	13%	48.8	8%	66.5	11%
Other	32.5	5%	30.3	5%	28.8	4%
Total	$592.6	100%	$590.2	100%	$628.9	100%

Market Financials

Anacomp's micrographics services revenue is derived primarily from banks, insurance companies, financial service companies, retailers, health care providers, manufacturers and government agencies.

Geographic Markets

Approximately 71% of Anacomp's total fiscal 1994 revenue was derived from the U.S. and 29% from international operations.

- One hundred percent of Anacomp's micrographics revenue is derived from the U.S.
- Anacomp's foreign revenue is derived from micrographics supplies, COM systems, maintenance and computer tape and other magnetic products primarily in the U.K., Germany, France, Canada and the Benelux countries.

Acquisitions

During fiscal 1994, Anacomp acquired 16 data service centers or the related customer base (all were incorporated with existing Anacomp service centers), a computer tape products company and the customer base of a micrographics supplies business for a total consideration of approximately $39.1 million.

- Effective January 1994, Anacomp purchased the COM services customer base of 14 data service centers operated by National Business Systems for approximately $14.8 million in cash and Anacomp common stock. All of these operations were incorporated into existing Anacomp data service centers.
- In December 1993, Anacomp acquired two data service centers from First Image Management Company (a unit of First Financial Management Corporation) in markets where Anacomp provides COM services to separate customer

© INPUT 1995 Reproduction prohibited.

bases. These operations were incorporated into existing Anacomp data service centers.

- In May 1994, Anacomp acquired Graham Acquisition Corporation, a computer tape products company for approximately $19.5 million.

During fiscal 1993, Anacomp acquired four micrographics service centers (all four were consolidated into existing Anacomp service centers) and certain assets of a microfilm reader maintenance services business for a total of $4.4 million.

During fiscal 1992, Anacomp acquired four COM micrographics service centers and one microforms service center (all five were consolidated into existing Anacomp service centers) and the COM maintenance service operations of TRW, Inc. for $9.6 million.

Key Products and Services

One hundred percent of Anacomp's $131.7 million in micrographics services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to more than 8,000 customers nationwide through 47 data centers.

- COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm.

- Value-added services provided by Anacomp include Anatrieve customized indexing and retrieval software.

The Image Conversion Services division operates 11 image conversion centers which provide microforms services.

- Microforms services take two forms—the conversion of both active and archival paper documents to microfilm (source document microfilming) and the reproduction of large databases, such as parts catalogs, on microfilm (micropublishing).

- This division also provides a service to record data and/or image management information onto CD ROMs, CD Rs, magneto-optical disk, magnetic tape or other electronic storage media. The process involves taking a human readable document, usually an original source paper document, scanning and digitizing the data and recording it on the chosen media for later retrieval.

- The division markets VELLOS, a document image storage and retrieval system Anacomp jointly developed with FileNet. VELLOS is based on either CD R optical disks or writable/erasable magneto-optical disks. It operates as a client/server system in the UNIX environment with retrieval options in Windows. The system is designed for small departmental multi-user applications.

Marketing and Sales

Effective October 1994, Anacomp reorganized its domestic sales force. The COM data service centers, COM systems and direct channel supplies sales organizations were merged and organized into two direct sales divisions covering the western and eastern sections of the U.S. Each division contains 14 Area Business Units (ABUs) responsible for marketing COM services and COM systems and related supplies and electronic image management systems in specific geographic areas of their division.

- The ABUs employ more than 170 sales people, including managers, who are trained to sell the merits of COM to their customers' senior management and to identify individual data processing applications for which COM is the most appropriate output alternative.

- The salespeople work with the customer to determine the best alternative between outsourcing to an Anacomp data service center

© INPUT 1995 Reproduction prohibited.

and purchasing their own COM systems for in-house operation.

Alliances

Anacomp has various alliances related to its COM hardware systems as follows:

- In November 1993, Anacomp announced an OEM agreement with IBM to produce an extended data storage product that bridges the gap between on-line storage and COM storage. The product, called the Anacomp Extended Storage System will feature an OEM version of IBM's 3995 Optical Library Dataserver and will allow mainframe computer users to store and retrieve data through desktop terminals or PCs while also supporting storage via COM systems. Anacomp received its first order in the fourth quarter of fiscal 1994.

- In November 1993, Anacomp and Pennant Systems, a division of IBM, announced a joint effort to develop software that will allow Anacomp's XFP 2000 to process and image IBM Advanced Function Printing (AFP) formatted data. The software is expected to be available during mid-1995.

- In October 1993, Anacomp and Xerox announced a joint effort to develop software that will enable the XFP 2000 to process and image Xerox high-speed printing data streams. This software is expected to be available during the first calendar quarter of 1995.

- Since October 1991, Anacomp has had a six-year agreement with Eastman Kodak to serve as the OEM for Kodak's new COM recorder. Through September 1994, Kodak has purchased 149 XFPs under the agreement, 25 of which were purchased in fiscal 1994.

Competitors

Anacomp's COM information services competitors include First Financial Management Corporation and hundreds of small, local service bureaus.

Image Conversion Services' competitors include Electronic Data Systems, customer in-house installations and numerous small regional providers.

© INPUT 1995 Reproduction prohibited.

INPUT

COMPANY
PROFILE

ANACOMP, INC.

11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
Phone: (317) 844-9666
Fax: (317) 848-1360

Chairman & CEO:	Louis P. Ferrero
President & COO:	J. Mark Woods
Status:	Public Corporation
Stock Exchange:	NYSE
Total Employees:	4,200 (10/93)
Total Revenue:	$590,208,000
Information Services Revenue:	$125,226,000
Fiscal Year End:	9/30/93

Key Points

- Anacomp is the largest micrographics company in the world.
- Anacomp continues to successfully acquire independent computer output microfilm (COM) data service centers located in attractive markets. The company has acquired 10 service centers and one microforms service center during the past three fiscal years, including four centers in fiscal 1993.
- Effective January 1994, Anacomp acquired 11 COM service centers from National Business Systems, Inc., increasing its COM processing customer base.
- Despite the recession, Anacomp continues to generate strong cash flow and has reduced its borrowed debt from $586 million in 1989 to $439 million at the end of fiscal 1993. Shareholder equity has increased by $93 million over the last four years.

Copyright 1994 by INPUT. Reproduction Prohibited.

Company Description

Anacomp, founded in 1968, provides COM processing (micrographics services) to more than 8,000 customers nationwide.

Other services provided by Anacomp, which represented 79% of revenue during fiscal 1993, include COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies and computer tape products.

Strategy

By providing a full range of COM services, including COM processing, hardware systems, maintenance, and supplies, Anacomp can customize its offerings to meet the specific needs of any customer.

Anacomp has been successful in acquiring independent computer output microfilm (COM) data service centers and consolidating these operations with its existing network where appropriate. Such acquisitions have resulted in additional volumes being serviced by Anacomp's existing facilities, thereby improving operating margins while maintaining competitive prices.

Anacomp continues to enhance its XFP 2000 COM recorder system, which permits graphic as well as alphanumeric reproduction of information. Since its introduction, sales of XFP's have increased consistently, with almost 300 units sold in 1993, 212 units sold in 1992 and 115 units sold in 1991.

- Once a customer purchases COM hardware, Anacomp has the opportunity to provide maintenance services and sell add-on hardware and supplies.

- Anacomp estimates that each dollar of COM system sales generates $0.36 of annual supply revenue and $0.14 of annual maintenance revenue.

During fiscal 1992, Anacomp completed two major factory consolidations, whereby its manufacturing operations in Hartford (WI) and its 10 separate manufacturing facilities around San Diego County were relocated to a single site in the San Diego area (Poway, CA). The facility consolidates one-fourth of Anacomp's work force under a single roof and provides some $60 million in savings over 10 years through reduced lease, personnel, transportation, utility and inventory costs.

Copyright 1994 by INPUT. Reproduction Prohibited.

Financials

Anacomp's total fiscal 1993 revenue was $590.2 million, a 6% decrease from fiscal 1992 revenue of $628.9 million. Net income of $18.6 million for fiscal 1993 includes a $6.9 million credit from the utilization of tax loss carryforwards. This compares with net income of $26.9 million in fiscal 1992, which includes an $8.7 million credit from the utilization of tax loss carryforwards.

- Approximately one-half of the revenue decline in fiscal 1993 was due to the continued maturing of certain computer tape products.
- Another quarter of the revenue decline was due to unfavorable currency fluctuations compared to the prior year.
- The balance of the decline is generally attributed to the continued weakness in the European economies.

In the five-year summary that follows, certain financials have been restated to reflect Anacomp's flexible and rigid oxide disk business (which was sold in 1990) as discontinued operations:

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR				
ITEM	9/93	9/92	9/91	9/90	9/89
Revenue	$590.2	$628.9	$635.4	$652.2	$648.9
· Percent change from previous year	(6%)	(1%)	(3%)	5%	55%
Income from continuing operations before taxes and extraordinary items	$22.9	$35.3	$33.5	$17.4 (a)	$23.8
· Percent change from previous year	(35%)	5%	93%	(37%)	(57%)
Net income (loss)	$18.6 (b)(c)	$26.9 (b)(c)	$29.2 (b)(c)	$9.6 (b)(c)	$(168.7) (b)
· Percent change from previous year	(31%)	(8%)	204%	106%	(487%)
Earnings (loss) per share	$0.39 (b)	$0.58 (b)	$0.64 (b)	$0.20 (b)	($4.47) (b)
· Percent change from previous year	(33%)	(9%)	220%	104%	(506%)

(a) Includes refinancing fees and debt waiver fees of $18.1 million.

(b) Includes net losses of $1.3 million ($0.04 per share) in fiscal 1993, $1.6 million ($0.04 per share) in fiscal 1992, $1.6 million ($0.04 per share) in fiscal 1991, $2.1 million ($0.05 per share) in fiscal 1990 and $178.4 million ($4.67 per share) in fiscal 1989 from discontinued operations.

(c) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $6.9 million, $8.7 million, $11.1 million and $5.7 million for fiscal 1993, 1992, 1991 and 1990, respectively.

Copyright 1994 by INPUT. Reproduction Prohibited.

Micrographics services revenue declined 2% during fiscal 1993 and rose 6% in fiscal 1992 and 3% in fiscal 1991 on volume increases of 13%, 14% and 10% in fiscal 1993, 1992 and 1991, respectively.

- The revenue decline in fiscal 1993 is due to the absence of certain government contracts that expired in 1992 and were not replaced, as well as reduced prices.
- The volume growth is split between new customers and increased services to existing customers.

Market Financials

Anacomp's micrographics services revenue is derived from clients in various industries including financial services, service bureaus, manufacturing, and government.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/93		9/92		9/91	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics						
Services	$125.2	21%	$127.9	20%	$120.2	19%
Supplies	223.1	38%	237.3	38%	259.3	41%
Maintenance	86.8	15%	91.6	15%	89.9	14%
Hardware systems	75.9	13%	76.8	12%	71.7	11%
	$511.0	87%	$533.6	85%	$541.1	85%
Computer tape products	$48.8	8%	$66.5	11%	$58.8	9%
Other	$30.4	5%	$28.8	4%	$35.5	6%
TOTAL	**$590.2**	**100%**	**$628.9**	**100%**	**$635.4**	**100%**

Geographic Markets

Approximately 70% of Anacomp's total fiscal 1993 revenue was derived from the U.S. and 30% was derived from foreign sources.

- One hundred percent of Anacomp's micrographics services revenue is derived from the U.S.

Copyright 1994 by INPUT. Reproduction Prohibited.

- Anacomp's foreign revenue is derived from COM hardware, supplies, maintenance services and computer tape products provided primarily in the U.K., Germany, France, Canada and the Benelux countries.

Acquisitions

In January 1994, Anacomp finalized the acquisition of 11 micrographics service centers from National Business Systems, Inc., a Minneapolis-based services company, for approximately $14 million in cash and Anacomp common stock. Each of these centers are resident in U.S. markets Anacomp currently serves. Consistent with past practice, Anacomp plans to merge these operations into its existing facilities.

During fiscal 1993, Anacomp acquired four micrographics service centers (all four were consolidated into existing Anacomp service centers) and certain assets of a microfilm reader maintenance services business for a total of $4.4 million.

During fiscal 1992, Anacomp acquired four COM micrographics service centers and one microforms service center (all five were consolidated into existing Anacomp service centers) and the COM maintenance service operations of TRW, Inc. for $9.6 million.

During fiscal 1991, Anacomp acquired two micrographics service centers (of which one was consolidated into an existing Anacomp service center) for $1.8 million.

During fiscal 1990, Anacomp acquired five micrographics service centers (of which four were consolidated into existing Anacomp service centers), certain assets of a micrographics reader manufacturing business and certain assets of a micrographics supplies distribution business for $5.3 million.

Divestitures

In September 1993, Anacomp sold two data service centers whose market potential did not meet the company's expectations.

Key Products and Services

One hundred percent of Anacomp's $125.2 million in micrographics services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to more than 7,800 customers nationwide through 50 data centers.

- COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm.

Copyright 1994 by INPUT. Reproduction Prohibited.

Value-added services provided by Anacomp include Anatrieve customized indexing and retrieval software.

- Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on microfilm) services. These services are available from eight data service centers.

During fiscal 1993, Anacomp established telecommunications links with several major clients, permitting data to be transmitted electronically from remote customer sites to Anacomp data service centers.

During the year, Anacomp also began offering a preprocessing system enabling its data centers to produce images on microfilm that exactly replicate output from Xerox laser printers.

As of the end of fiscal 1993, Anacomp had more than 100 of its XFP systems installed in its data service centers.

Marketing and Sales

Anacomp maintains separate sales forces for its data services centers, installed COM system customers, micrographics supplies dealers, magnetic media dealers and distributors and international activities.

Anacomp has 170 COM data service center salespeople, including data center managers, selling COM services to potential customers' senior management.

Alliances

Anacomp has various alliances related to its COM hardware systems as follows:

- In November 1993, Anacomp announced an OEM agreement with IBM to produce an extended data storage product that bridges the gap between on-line storage and COM storage. The product, called the Anacomp Extended Storage System will feature an OEM version of IBM's 3995 Optical Library Dataserver and will allow mainframe computer users to store and retrieve data through desktop terminals or PCs while also supporting storage via COM systems

- In November 1993, Anacomp and Pennant Systems, a division of IBM, announced a joint effort to develop software that will allow Anacomp's XFP 2000 to process and image IBM Advanced Function Printing (AFP) formatted data.

Copyright 1994 by INPUT. Reproduction Prohibited.

- In October 1993, Anacomp and Xerox announced a joint effort to develop software that will enable the XFP 2000 to process and image Xerox high-speed printing data streams.
- Since October 1991, Anacomp has had a six-year agreement with Eastman Kodak to serve as the OEM for Kodak's new COM recorder.

Competitors

Anacomp's COM information services competitors include First Financial Management Corporation and hundreds of small, local service bureaus.

Copyright 1994 by INPUT. Reproduction Prohibited.

ANACOMP, INC.

11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
Phone: (317) 844-9666

Chairman, President, and CEO:	Louis P. Ferrero
Status:	Public Corporation
Stock Exchange:	NYSE
Total Employees:	4,500 (10/92)
Total Revenue:	$628,940,000
Information Services Revenue:	$127,853,000
Fiscal Year End:	9/30/92

Key Points

- Anacomp is the largest micrographics company in the world. The company's strategy to "sell savings" through micrographics products and services has produced steady results despite the continuing recession.
- Anacomp has been successful in acquiring independent computer output microfilm (COM) data service centers and consolidating these operations with its existing network where appropriate. Such acquisitions have resulted in additional volumes being serviced by Anacomp's existing facilities, thereby improving operating margins while maintaining competitive prices.
- By providing a full range of COM services, including COM processing, hardware systems, maintenance, and supplies, Anacomp can customize its offerings to meet the specific needs of any customer.

Copyright 1993 by INPUT. Reproduction Prohibited.

Company Description

Anacomp, founded in 1968, provides COM processing services to over 7,800 customers nationwide.

Non-information services provided by Anacomp, which represented 80% of revenue during fiscal 1992, include COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies, and computer tape products.

Financials

In the five-year summary that follows, certain financials have been restated to reflect Anacomp's flexible and rigid oxide disk business (which was sold in 1990) as discontinued operations:

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR				
ITEM	9/92	9/91	9/90	9/89	9/88
Revenue	$628.9	$635.4	$652.2	$648.9	$417.9
· Percent change from previous year	(1%)	(3%)	5%	55%	51%
Income (loss) from continuing operations before taxes and extraordinary items	$35.3	$33.5	$17.4 (a)	$23.8	$55.0
· Percent change from previous year	5%	93%	(37%)	(57%)	82%
Net income (loss)	$26.9 (b)(c)	$29.2 (b)(c)	$9.6 (b)(c)	$(168.7) (b)	$43.6 (c)
· Percent change from previous year	(8%)	204%	106%	(487%)	64%
Earnings (loss) per share	$0.58 (b)	$0.64 (b)	$0.20 (b)	($4.47) (b)	$1.10
· Percent change from previous year	(9%)	220%	104%	(506%)	57%

(a) Includes refinancing fees and debt waiver fees of $18.1 million.

(b) Includes net losses of $1.6 million ($0.04 per share) in fiscal 1992, $1.6 million ($0.04 per share) in fiscal 1991, $2.1 million ($0.05 per share) in fiscal 1990, and $178.4 million ($4.67 per share) in fiscal 1989 from discontinued operations.

(c) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $8.7 million, $11.1 million, $5.7 million, and $14.5 million for fiscal 1992, 1991, 1990, and 1988.

Copyright 1993 by INPUT. Reproduction Prohibited.

Anacomp's total fiscal 1992 revenue was $628.9 million, a 1% decrease from fiscal 1991 revenue of $635.4 million. Net income of $26.9 million for fiscal 1992 includes a $8.7 million credit from the utilization of tax loss carryforwards. This compares with net income of $29.2 million in fiscal 1991, which includes a $11.1 million credit from the utilization of tax loss carryforwards.

During fiscal 1992 micrographics services, maintenance services, hardware systems, and computer tape products all enjoyed revenue increases ranging from 2% to 13%. Micrographics supplies revenues, however, decreased 8%, primarily reflecting a decline in film and chemistry sales, most of which occurred in the indirect sales channels.

COM services revenue rose 6% in fiscal 1992, 3% in fiscal 1991 and 5% in fiscal 1990 on volume increases of 14%, 10%, and 16% in fiscal 1992, 1991 and 1990, respectively. Revenue growth is split between new customers and increased services to existing customers. Reductions in operating costs kept margins steady in spite of price pressures.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/92		9/91		9/90	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics						
Services	$127.9	20%	$120.2	19%	$116.3	18%
Supplies	237.3	38%	259.3	41%	260.7	40%
Maintenance	91.6	15%	89.9	14%	92.9	14%
Hardware systems	76.8	12%	71.7	11%	83.9	13%
	$533.6	85%	$541.1	85%	$553.8	85%
Computer tape products	$66.5	11%	$58.8	9%	$62.2	10%
Other	$28.8	4%	$35.5	6%	$36.2	5%
TOTAL	**$628.9**	**100%**	**$635.4**	**100%**	**$652.2**	**100%**

Copyright 1993 by INPUT. Reproduction Prohibited.

Acquisitions

During fiscal 1992, Anacomp acquired four COM micrographics service centers and one microforms service center (all five were consolidated into existing Anacomp service centers) and the COM maintenance service operations of TRW, Inc. for $9.6 million.

During fiscal 1991, Anacomp acquired two micrographics service centers (of which one was consolidated into an existing Anacomp service center) for $1.8 million.

During fiscal 1990, Anacomp acquired five micrographics service centers (of which four were consolidated into existing Anacomp service centers), certain assets of a micrographic reader manufacturing business, and certain assets of a micrographics supplies distribution business for $5.3 million.

Competitors

Anacomp's COM information services competitors include First Financial Management Corporation and hundreds of small, local service bureaus.

Key Products and Services

One hundred percent of Anacomp's $127.9 million in information services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to over 7,800 customers nationwide through 50 data centers.

- COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm. Value-added services provided by Anacomp include Anatrieve customized indexing and retrieval software.

- Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on microfilm) services. These services are available from seven data service centers.

Industry Markets

Anacomp's information services revenue is derived from clients in various industries including financial services, service bureaus, manufacturing, and government.

Copyright 1993 by INPUT. Reproduction Prohibited.

Geographic Markets

Approximately 69% of Anacomp's total fiscal 1992 revenue was derived from the U.S. and 31% was derived from foreign sources.

- One hundred percent of Anacomp's COM information services revenue is derived from the U.S.
- Anacomp's foreign revenue is derived from COM hardware, supplies, and maintenance services and computer tape products provided primarily in Germany, the U.K., France, the Benelux countries, and Canada.

Computer Hardware and Software

Anacomp operates 50 COM data centers throughout the U.S. The centers use COM hardware to reproduce information from magnetic tapes to 16mm microfilm or to microfiche.

Copyright 1993 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 4,600 (10/91)
Total Revenue, Fiscal Year End 9/30/91: $635,361,000
Information Services Revenue: $120,238,000

The Company

Anacomp, Inc., founded in 1968, provides computer output microfilm (COM) processing services to over 7,800 customers nationwide.

- Non-information services provided by Anacomp, which represented 81% of revenue during fiscal 1991, include COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies, and computer tape products.

Anacomp's business strategy over the past several years has been to focus on expanding its COM and micrographics product and service offerings. Over the past three years, Anacomp has made 14 acquisitions, including the following:

- During fiscal 1991, Anacomp acquired two micrographics service centers (of which one was consolidated into an existing Anacomp service center) for $1.8 million.

- During fiscal 1990, Anacomp acquired five micrographics service centers (of which four were consolidated into existing Anacomp service centers), certain assets of a micrographic reader manufacturing business, and certain assets of a micrographics supplies distribution business for $5.3 million.

- During fiscal 1989, Anacomp acquired seven micrographics service centers for $5.7 million.

In March 1990, Anacomp sold the flexible disk operations it acquired with Xidex Corporation to Hanny Magnetics, Ltd. and in December 1990 closed the rigid oxide business.

Copyright 1992 by INPUT. Reproduction Prohibited.

- Xidex, acquired in August 1988, provided data storage products in two primary segments: micrographics, which includes duplicate microfilm, microfilm readers, and reader/printers; and magnetics, which includes flexible and rigid oxide disks.

- Xidex's micrographics and certain magnetics operations have been retained and have been merged into Anacomp's micrographics business.

Anacomp's total fiscal 1991 revenue was $635.4 million, a 3% decline from fiscal 1990 revenue of $652.2 million. A five-year financial summary follows:

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY (a)
($ millions, except per share data)

	FISCAL YEAR				
ITEM	9/91	9/90	9/89 (a)	9/88	9/87
Revenue	$635.4	$652.2	$648.9	$417.9	$277.0
· Percent change from previous year	(3%)	5%	55%	51%	154%
Income from continuing operations before taxes and extraordinary items	$33.5	$17.4 (b)	$23.8	$55.0	$30.2
· Percent change from previous year	93%	(37%)	(57%)	82%	269%
Net income (loss)	$29.2 (c)(d)	$9.6 (c)(d)	$(168.7) (c)	$43.6 (d)	$26.5 (d)
· Percent change from previous year	204%	106%	(487%)	64%	551%
Earnings (loss) per share	$0.64 (c)	$0.20 (c)	($4.47) (c)	$1.10	$0.70
· Percent change from previous year	220%	104%	(506%)	57%	438%

(a) Financials have be restated to reflect Xidex's flexible and rigid oxide disk business as discontinued operations.

(b) Includes refinancing fees and debt waiver fees of $18.1 million.

(c) Includes net losses of $1.6 million ($0.04 per share) in fiscal 1991, $2.1 million ($0.05 per share) in fiscal 1990, and $178.4 million ($4.67 per share) in fiscal 1989 from discontinued Xidex operations.

(d) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $11.1 million $5.7 million, $14.5 million, and $8.9 million for fiscal 1991, 1990, 1988, and 1987, respectively.

Copyright 1992 by INPUT. Reproduction Prohibited.

In all but one segment of the company's business, fiscal 1991 revenues were relatively stable.

- COM services revenue rose 3% in fiscal 1991 and 5% in fiscal 1990 on volume increases of 10% and 16% in fiscal 1991 and 1990, respectively. Reductions in operating costs kept margins steady in spite of price pressure. The growth is split between new customers and increased services to existing customers.

- Micrographics supplies revenues were flat, computer tape products and maintenance services were down, and hardware sales declined significantly due to the general worldwide weakness in durable goods.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/91		9/90		9/89	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics						
Services	$120.2	19%	$116.3	18%	$111.3	17%
Supplies	259.3	41%	260.7	40%	256.6	40%
Maintenance	89.9	14%	92.9	14%	88.0	13%
Hardware systems	71.7	11%	83.9	13%	88.2	14%
	$541.1	85%	$553.8	85%	$544.1	84%
Computer tape products	$58.8	9%	$62.2	10%	$58.0	9%
Other (a)	$35.5	6%	$36.2	5%	$46.8	7%
TOTAL	**$635.4**	**100%**	**$652.2**	**100%**	**$648.9**	**100%**

(a) Other revenue includes certain Xidex product units and information services business that were sold or discontinued during 1988.

Anacomp's COM information services competitors include First Financial Management Corporation and hundreds of small, local service bureaus.

Copyright 1992 by INPUT. Reproduction Prohibited.

Key Products and Services

One hundred percent of Anacomp's $120.2 million in information services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to over 7,800 customers nationwide through 52 data centers.

- COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm. Value-added services provided by Anacomp include Anatrieve customized indexing and retrieval software.
- Over 95% of COM service revenues are repetitive on a daily or weekly basis and over 75% result from multiyear contracts.
- Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on microfilm) services. These services are available from seven data service centers.

Industry Markets

Anacomp's information services revenue is derived from clients in various industries including financial services, service bureaus, manufacturing, and government.

Geographic Markets

Approximately 71% of Anacomp's total fiscal 1991 revenue was derived from the U.S. and 29% was derived from foreign sources.

- One hundred percent of Anacomp's COM information services revenue is derived from the U.S.
- Anacomp's foreign revenue is derived from COM hardware, supplies, and maintenance services provided primarily in Germany, the U.K., France, the Benelux countries, and Canada.

Computer Hardware and Software

Anacomp operates 52 COM data centers throughout the U.S. The centers use COM hardware to reproduce information from magnetic tapes to 16 mm microfilm or to microfiche.

Copyright 1992 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 5,000 (12/90)
Total Revenue, Fiscal Year End 9/30/90: $652,238,000
Information Services Revenue: $116,368,000

The Company

Anacomp, Inc., founded in 1968, provides computer output microfilm (COM) processing services to over 7,800 customers nationwide.

- Non-information services provided by Anacomp, which represented 82% of revenue during fiscal 1990, include COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies, and computer tape products.

Anacomp's business strategy over the past several years has been to focus on expanding its COM and micrographics product and service offerings. Recent acquisitions include the following:

- During fiscal 1990, Anacomp acquired five micrographics service centers (of which four were consolidated into existing Anacomp service centers), certain assets of a micrographic reader manufacturing business, and certain assets of a micrographics supplies distribution business for $5.3 million.

- During fiscal 1989, Anacomp acquired seven micrographics service centers for $5.7 million.

In March 1990, Anacomp sold the flexible disk operations it acquired with Xidex Corporation to Hanny Magnetics, Ltd.

- Xidex, acquired in August 1988, provided data storage products in two primary segments: micrographics, which includes duplicate microfilm, microfilm readers, and reader/printers; and magnetics, which includes flexible and rigid oxide disks.

Copyright 1991 by INPUT. Reproduction Prohibited.

- Xidex's micrographics and certain magnetics operations have been retained and have been merged into Anacomp's micrographics business.

- In the rigid disk business, Anacomp has reduced staff and other costs and expects to continue to generate positive cash flow as this business is phased out (by mid-1991).

Anacomp's total fiscal 1990 revenue reached $652.2 million, a 5% increase over fiscal 1989 revenue of $648.9 million. Net income was $9.6 million compared to losses of $168.7 million for fiscal 1989, which include a loss of $178.4 million from discontinued Xidex operations. A five-year financial summary follows:

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY (a)
($ millions, except per share data)

	FISCAL YEAR				
ITEM	9/90	9/89 (a)	9/88	9/87	9/86
Revenue	$652.2	$648.9	$417.9	$277.0	$108.9
• Percent change from previous year	5%	55%	51%	154%	(3%)
Income (loss) from continuing operations before taxes and extraordinary items	$17.4	$23.8	$55.0	$30.2	$8.2
• Percent change from previous year	(37%)	(57%)	82%	269%	(19%)
Net income (loss)	$9.6	$(168.7)	$43.6	$26.5	$4.1
• Percent change from previous year	(b) 106%	(b) (487%)	(c) 64%	(c) 551%	(c) *
Earnings (loss) per share	$0.20	($4.47)	$1.10	$0.70	$0.13
• Percent change from previous year	(b) 104%	(b) (506%)	57%	438%	550%

* *Percent change exceeds 1,000%.*

(a) Financials have be restated to reflect Xidex's flexible and rigid oxide disk business as discontinued operations.

(b) Includes net losses of $2.1 million ($0.05 per share) in fiscal 1990 and $178.4 million ($4.67 per share) in fiscal 1989 from discontinued Xidex operations.

(c) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $14.5 million, $8.9 million, and $2.5 million for fiscal 1988, 1987, and 1986, respectively.

Copyright 1991 by INPUT. Reproduction Prohibited.

COM services revenue rose 5% in fiscal 1990 and 17% in fiscal 1989. Commercial COM service volume increased by 16% during fiscal 1990, split between new customers and increased services to existing customers, offset by the wind-down of a short-term non-COM contract.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/90		9/89		9/88	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics						
Services	$116.3	18%	$111.3	17%	$95.4	23%
Supplies	260.7	40%	256.6	40%	136.5	33%
Maintenance	92.9	14%	88.0	13%	85.2	20%
Hardware systems	83.9	13%	88.2	14%	88.5	21%
	$553.8	85%	$544.1	84%	$405.6	97%
Computer tape products	$62.2	10%	$58.0	9%	--	--
Other (a)	$36.2	5%	$46.8	7%	$12.3	3%
TOTAL	**$652.2**	**100%**	**$648.9**	**100%**	**$417.9**	**100%**

(a) Other revenue includes certain Xidex product units and information services business that were sold or discontinued during 1988.

Revenue for the three months ending December 31, 1990 was $157.0 million, compared to $147.2 million for the same period in 1988. Net income reached $5.9 million, compared to $4.6 million for the same period a year ago.

Anacomp's COM information services competitors include Zytron and Endata Corporation (both subsidiaries of First Financial Management Corporation), and hundreds of small, local service bureaus.

Copyright 1991 by INPUT. Reproduction Prohibited.

Key Products and Services

One hundred percent of Anacomp's $116.4 million in information services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to over 7,800 customers nationwide through 58 data centers.

- COM services are available from 51 data centers and include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm. Value-added services provided by Anacomp include Anatrieve customized indexing and retrieval software.
 - Over 95% of COM service revenues are repetitive on a daily or weekly basis and over 75% result from multiyear contracts.
- Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on microfilm) services. These services are available from seven data service centers.

Industry Markets

Anacomp's information services revenue is derived from clients in various industries including financial services, service bureaus, manufacturing, and government.

Geographic Markets

Approximately 72% of Anacomp's total fiscal 1990 revenue was derived from the U.S. and 28% was derived from foreign sources.

- One hundred percent of Anacomp's information services revenue is derived from the U.S.
- Anacomp's foreign revenue is derived from COM hardware, supplies, and maintenance services provided primarily in Germany, the U.K., France, the Benelux countries, and Canada.

Computer Hardware and Software

Anacomp operates 51 COM data centers throughout the U.S. The centers use COM hardware to reproduce information from magnetic tapes to 16 mm microfilm or to microfiche.

Copyright 1991 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 7,500 (9/89)
Total Revenue, Fiscal Year End 9/30/89: $648,883,000
Information Services Revenue: $111,269,000

The Company

Anacomp, Inc., founded in 1968, provides computer output microfilm (COM) processing services to over 6,000 customers nationwide.

- Non-information services provided by Anacomp, which represented 83% of revenue during fiscal 1989, include COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies, and computer tape products.

Anacomp's business strategy over the past several years has been to focus on expanding its COM product and service offerings. As a result, the company has made the following information services acquisitions and divestitures:

- During fiscal 1989, Anacomp acquired seven micrographics service centers for $5.7 million.
- During fiscal 1988, Anacomp acquired two micrographics service centers and a micrographics film and product maintenance business for $7 million.
- Anacomp acquired 13 micrographics service centers during fiscal 1986 and 1985 for approximately $6.4 million. No data center acquisitions were made during fiscal 1987.
- During late 1988, Anacomp divested the remainder of its non-COM information services businesses as follows:
 - The Credit Union division, which provided remote computing services and turnkey systems to credit unions, was sold to First Financial Management Corporation in November 1988.

Copyright 1990 by INPUT. Reproduction Prohibited.

- The Data Entry division, which provided data entry services and child support turnkey systems for state and local governments, was sold to the division's management in late 1988. This business now operates as Curran Data Technologies, a private company located in Indianapolis.

- The professional services facilities management contract with the state of Indiana's Bureau of Motor Vehicles expired in late 1988. Indiana has taken over the responsibility for these operations.

- These businesses contributed approximately $8.4 million to Anacomp's fiscal 1988 revenue, compared to $16.2 in fiscal 1987.

- In September 1987, Anacomp sold its Industrial Systems Division to Electronic Data Systems in exchange for future royalty considerations. This division developed and marketed the Purchasing Decision Support application software product for industrial users. Anacomp recorded a $1.8 million loss from this sale in fiscal 1987.

- In July 1986, Anacomp sold its BANKSERV retail banking product line to American Management Systems, Inc. for $3.9 million in cash and guaranteed minimum royalties.

- In August 1986, Anacomp sold its CIS banking software product to Electronic Data Systems for $4.8 million in cash and notes.

Non-information services acquisitions include the following:

- DatagraphiX, Inc., acquired by Anacomp in March 1987, manufacturers COM recorders and related devices, provides maintenance services for COM equipment, and sells micrographics supplies.

- Consolidated Micrographics, Inc. (CM), acquired in June 1987, manufactured a line of high-quality, high-volume microfilm duplicators which are complementary to the DatagraphiX product line. The operations of CM have been merged into DatagraphiX.

- Xidex Corporation, acquired in August 1988, provided data storage products in two primary segments: micrographics, which includes duplicate microfilm, microfilm readers, and reader/printers; and magnetics, which included flexible and rigid oxide disks.

Copyright 1990 by INPUT. Reproduction Prohibited.

- Xidex's micrographics and certain magnetics operations have been retained and have been merged into Anacomp's micrographics business.

- Xidex's flexible and rigid disk businesses are now reported as discontinued operations.

Anacomp's total fiscal 1989 revenue reached $648.9 million, a 55% increase over fiscal 1988 revenue of $417.9 million. Net losses for fiscal 1989 were $170.8 million and include a loss of $178.4 million from discontinued operations. A five-year financial summary follows:

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY (a)
($ millions, except per share data)

	FISCAL YEAR				
ITEM	9/89 (a)	9/88	9/87	9/86	9/85
Revenue	$648.9	$417.9	$277.0	$108.9	$112.9
• Percent increase (decrease) from previous year	55%	51%	154%	(3%)	(2%)
Income (loss) from continuing operations before taxes and extraordinary items	$23.8	$55.0	$30.2	$8.2	$10.1
• Percent increase (decrease) from previous year	(57%)	82%	269%	(19%)	450%
Net income (loss)	$(170.8) (b)	$43.6 (c)	$26.5 (c)	$4.1 (c)	$0.4 (c)
• Percent increase (decrease) from previous year	(492%)	64%	551%	*	100%
Earnings (loss) per share	($4.47)	$1.10	$0.70	$0.13	$0.02
• Percent increase (decrease) from previous year	(506%)	57%	438%	550%	100%

* *Percent change exceeds 1,000%.*

(a) *Financials have be restated to reflect Xidex's flexible and rigid oxide disk business as discontinued operations.*

(b) *Includes net losses of $178.4 million from discontinued operations.*

(c) *Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $14.5 million, $8.9 million, $2.5 million, and $1.8 million for fiscal 1988, 1987, 1986, and 1985, respectively.*

 Copyright 1990 by INPUT. Reproduction Prohibited.

COM services revenue rose 17% in fiscal 1989 and 11% in fiscal 1988. The improvement is due to a combination of higher volumes through existing centers, the contributions of Xidex's microprinting operations, and acquisitions of customer bases in selected geographical markets.

Income from continuing operations (before extraordinary losses) was nearly $9.8 million.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/89		9/88		9/87	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics						
Services	$111.2	17%	$95.4	23%	$85.6	31%
Supplies	260.4	40%	136.5	33%	69.6	25%
Maintenance	88.0	13%	85.2	20%	41.6	15%
Hardware systems	88.2	14%	88.5	21%	39.9	14%
	$547.8	84%	$405.6	97%	$236.7	85%
Computer tape products	$62.8	10%	--	--	--	--
Other (a)	$38.3	6%	$12.3	3%	$40.3	15%
TOTAL	**$648.9**	**100%**	**$417.9**	**100%**	**$277.0**	**100%**

(a) Other revenue includes certain Xidex products units and information services business that were sold or discontinued during 1988.

Revenue for the three months ending December 31, 1989 was $147.2 million, compared to $155.1 million for the same period in 1988. Net income reached $4.6 million, compared to a loss of $508,000 for the same period a year ago.

- Revenue from COM processing services increased more than 9% from the prior year's first quarter. During the quarter, Anacomp added more than 100 clients that were first-time COM users.

Copyright 1990 by INPUT. Reproduction Prohibited.

Anacomp's COM information services competitors include Zytron (a subsidiary of Dun & Bradstreet), Endata Corporation (a subsidiary of First Financial Management Corporation), and hundreds of small, local service bureaus.

Key Products and Services

One hundred percent of Anacomp's $111.2 million in information services revenue was derived from COM and microforms processing services.

COM and microforms services are provided to over 6,000 customers nationwide through 53 data centers.

- COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm. Value-added services provided by Anacomp include customized indexing and retrieval software.
 - Over 95% of COM service revenues are repetitive on a daily or weekly basis and over 80% result from multiyear contracts.
- Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on microfilm) services.

Industry Markets

Anacomp's information services revenue is derived from clients in various industries including financial services, service bureaus, manufacturing, and government.

Geographic Markets

Approximately 72% of Anacomp's total fiscal 1989 revenue was derived from the U.S. and 28% was derived from foreign sources.

- One hundred percent of Anacomp's information services revenue is derived from the U.S.
- Anacomp's foreign revenue is derived from DatagraphiX subsidiaries located in Belgium, France, the Netherlands, the U.K., West Germany, and Canada, and from 100 foreign distributors.

Copyright 1990 by INPUT. Reproduction Prohibited.

Computer Hardware and Software

Anacomp operates 53 COM data centers located in 24 states. The centers use COM hardware, such as that produced by DatagraphiX, to reproduce information from magnetic tapes to 16 mm microfilm or to microfiche.

Copyright 1990 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 8,000 (5/89)
Total Revenue, Fiscal Year End 9/30/88: $450,503,000
Information Services Revenue: $103,800,000

The Company

Anacomp, Inc., founded in 1968, provides computer output microfilm (COM) services to over 6,000 customers nationwide. Anacomp also provides COM hardware systems, maintenance services for COM and other related hardware, duplicate microfilm and other micrographics supplies, and flexible and rigid oxide disks.

Anacomp's business strategy over the past several years has been to focus on expanding its COM product and service offerings. As a result, the company has made the following acquisitions and divestitures:

Information services-related acquisitions and divestitures include the following:

- During late 1988, Anacomp divested the remainder of its non-COM information services activities as follows:
 - The Credit Union division, which provided remote computing services and turnkey systems to credit unions was sold to First Financial Management Corporation in November 1988.
 - The Data Entry division, which provided data entry services and child support turnkey systems for state and local governments, was sold to the division's management in late 1988. This business now operates as Curran Data Technologies, a private company located in Indianapolis.
 - The professional services facilities management contract with the state of Indiana's Bureau of Motor Vehicles expired in late 1988. Indiana has taken over the responsibility for these operations.

Copyright 1989 by INPUT. Reproduction Prohibited.

- These businesses contributed approximately $8.4 million to Anacomp's fiscal 1988 revenue, compared to $16.2 in fiscal 1987.

- During fiscal 1988, Anacomp acquired two micrographics service centers and a micrographics film and product maintenance business for a total consideration of $7 million, of which approximately $4.6 million has been assigned to excess of purchase price over net assets.

- Anacomp acquired 13 micrographics service centers during fiscal 1986 and 1985 for a total consideration of approximately $6.4 million. No data center acquisitions were made during fiscal 1987.

- In September 1987, Anacomp sold its Industrial Systems Division to Electronic Data Systems in exchange for future royalty considerations. This division developed and marketed the Purchasing Decision Support application software product for industrial users. Anacomp recorded a $1.8 million loss from this sale in fiscal 1987.

- During 1986, Anacomp adopted a plan to discontinue the operations of its Banking Software Division and its general data processing service division.

 - In July 1986, Anacomp sold its BANKSERV retail banking product line to American Management Systems, Inc for $3.9 million in cash and guaranteed minimum royalties.

 - In August 1986, Anacomp sold its CIS banking software product to Electronic Data Systems for $4.8 million in cash and notes.

 - The remaining assets of the Banking Software Division and general data processing service operations were sold or otherwise disposed of by December 31, 1986.

 - These two divisions contributed combined revenue of approximately $6.2 million and $10.3 million, and net losses (after income tax benefit) of approximately $2.4 million and $5.5 million to Anacomp's fiscal 1986 and 1985 results, respectively.

Non-information services acquisitions include the following:

Copyright 1989 by INPUT. Reproduction Prohibited.

- In August 1988, Anacomp completed the acquisition of Xidex Corporation for approximately $400.4 million. The acquisition was accounted for as a purchase.
 - Xidex manufactures and markets data storage products worldwide in two primary segments: Micrographics, which includes duplicate microfilm, microfilm readers, and reader/printers; and Magnetics, which includes flexible and rigid oxide disks.
 - Xidex had revenue of approximately $615 million for the fiscal year ending June 30, 1988. Xidex's operations contributed approximately $42.3 million to Anacomp's fiscal 1988 revenue (for the month of September 1988).
 - Anacomp intends to restructure certain of Xidex's operations through redeployment, consolidation, or disposition.
 - Xidex's micrographics operations have been merged into various divisions within Anacomp's Micrographics Group. Xidex's non-micrographics operations now form Anacomp's Magnetics Group.
 - Results from the magnetics portion of Xidex have been disappointing to Anacomp management. As a result, Anacomp is exploring the creation of an independent unit for the magnetics business and now carries the group's financial results as discontinued operations.
- During fiscal 1988, Anacomp acquired the European product maintenance businesses of Bell & Howell and AM International for $4.5 million.
- In March 1987, Anacomp purchased DatagraphiX, Inc. (a wholly owned subsidiary of General Dynamics Corporation) for $128 million.
 - DatagraphiX manufactures COM recorders and related devices, provides maintenance services for its installed base of more than 2,650 COM hardware systems worldwide, and sells micrographics supplies. DatagraphiX also manufactures the A-NEW display device used in the U.S. Navy's P3-C anti-submarine warfare aircraft and by certain foreign governments.
 - DatagraphiX had annual revenue of approximately $240 million and 2,500 employees at the time of the acquisition.

Copyright 1989 by INPUT. Reproduction Prohibited.

- DatagraphiX also marketed and serviced a line of non-impact printers manufactured by others. Effective October 30, 1987, Anacomp sold the printer maintenance contracts and related inventories to NCR Corporation. This business contributed approximately $16.3 million ($7.5 million in services and $8.8 million in equipment and supplies) to Anacomp's fiscal 1987 revenue.

- The operations of DatagraphiX have been merged into Anacomp's Major Products and MultiproducX (Supplies) Divisions.

- In June 1987 Anacomp purchased Consolidated Micrographics, Inc. (CM), a private company headquartered in Laguna Niguel (CA), for $14.1 million in cash and the assumption of certain liabilities valued at $4.8 million.

 - CM manufactures microfiche duplicators, cameras, and storage/retrieval devices.

 - CM had annual revenues of approximately $30 million and 400 employees at the time of the acquisition.

 - CM's manufacturing operations have been relocated and merged into those of DatagraphiX. Anacomp will continue to manufacture CM's duplicator line along with selected other products.

In the five-year financial summary that follows, fiscal 1988 results include the operations of Xidex (including its micrographics and magnetics businesses) from the date of its acquisition and fiscal 1987 results include the operations of DatagraphiX and CM from their respective dates of acquisition. Revenues prior to fiscal 1987 have been restated to reflect continuing operations only.

Copyright 1989 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY (a)
($ thousands, except per share data)

	FISCAL YEAR				
ITEM	9/88	9/87	9/86	9/85	9/84
Revenue	$450,503	$277,011	$108,920	$112,866	$115,221
• Percent increase (decrease) from previous year	63%	154%	(3%)	(2%)	2%
Income (loss) from continuing operations before taxes and extraordinary items	$52,862	$30,184	$8,186	$10,086	$(35,312)
• Percent increase (decrease) from previous year	75%	269%	(19%)	450%	N/A
Net income (loss)	$43,585 (b)	$26,510 (b)	$4,073 (b)	$362 (b)	$(116,227)
• Percent increase (decrease) from previous year	64%	551%	*	100%	*
Earnings (loss) per share	$1.10	$0.70	$0.13	$0.02	$(9.08)
• Percent increase (decrease) from previous year	57%	438%	550%	100%	*

* *Percent change exceeds 1,000%.*

(a) Financials will be restated during fiscal 1989 to reflect Xidex's magnetics business as discontinued operation.

(b) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $14.5 million, $8.9 million, $2.5 million, and $1.8 million for fiscal 1988, 1987, 1986, and 1985, respectively.

Total fiscal 1988 revenue increased more than $173 million over fiscal 1987 primarily due to the inclusion of DatagraphiX and Consolidated Micrographics for the full fiscal year and from $42.3 million in revenue from Xidex.

- COM services revenue rose 11%, from $85.6 million in fiscal 1987, to $95.4 million in fiscal 1988.

Total fiscal 1987 revenue increased more than $168 million over fiscal 1986, with DatagraphiX and CM contributing approximately $150 million of that increase.

Copyright 1989 by INPUT. Reproduction Prohibited.

- Revenue from Anacomp's various micrographics services increased 13% during fiscal 1987, compared to an 8% growth in fiscal 1986. No data center acquisitions were completed in fiscal 1987, so all current year growth was internally generated.

- Other information services revenue (which includes credit union processing and turnkey systems, data entry services, child support government turnkey systems, and facilities management services) increased 25% during fiscal 1987, compared to a 33% decrease in fiscal 1986. Declines in 1986 were caused by major contracts expiring without replacement sales.

Anacomp's operations are currently organized into two groups and several divisions as follows:

- The Micrographics Group consists of the following divisions:

 - The Micrographics Services Division includes the COM Services and Microforms/Microprinting units. This division provides computer output microfilm, source document microfilming, and micropublishing processing services through 60 data centers located throughout the U.S. These services are provided to a range of industries, including financial services, manufacturing, service bureaus, and government. The Micrographics Services Division has approximately 1,000 employees.

 - The Major Products Division was established with the acquisitions of DatagraphiX and CM to manufacture and market COM recorders, processors, and duplicators.. The Major Products Division has approximately 800 employees.

 - The Microimage Display Division, formed with the acquisition of Xidex, manufactures and markets microfilm readers and reader/printers.

 - The Product Maintenance Division provides hardware maintenance services for the company's COM systems. The division's operations are being extended to include maintenance services for other COM and data processing products. The Product Maintenance Division has over 1,000 employees.

 - The MultiproducX Division (MX) markets COM supplies and peripheral equipment through direct sales and catalogs. This division has approximately 80 employees.

Copyright 1989 by INPUT. Reproduction Prohibited.

- The Micrographics International Division markets DatagraphiX COM equipment, CM duplicators, and MX supplies, and provides maintenance services through six foreign subsidiaries (in Belgium, France, the Netherlands, the U.K., West Germany, and Canada) and 28 foreign distributorships, and provides associated maintenance services. This division has approximately 500 employees.

- The Magnetics Group continues to manufacture and market flexible and rigid oxide disks for magnetic storage, however its results are now accounted for as discontinued operations.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/88		9/87		9/86	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics						
Services	$95.4	21%	$85.6	31%	$75.9	70%
Supplies	136.5	30%	69.6	25%	20.0	18%
Maintenance	85.2	19%	41.6	15%	--	--
Hardware systems	88.5	20%	39.9	14%	--	--
	$405.6	90%	$236.7	85%	$95.9	88%
Magnetics	$32.6	7%	--	--	--	--
Other (a)	$12.3	3%	$40.3	15%	$13.0	12%
TOTAL	**$450.5**	**100%**	**$277.0**	**100%**	**$108.9**	**100%**

(a) Other revenue includes certain Xidex products units and information services business that were sold or discontinued during 1988.

Revenue for the six months ending March 31, 1989 was $273.0 million, compared to $200.9 million for the same period in 1988. Net income was $7.5 million, compared to $22.8 million for the same period a year ago. Declines in net income were attributed to interest expenses associated with the acquisition of Xidex in 1988.

As of December 1988, Anacomp had approximately 9,000 employees. The company currently has 8,000 employees.

Copyright 1989 by INPUT. Reproduction Prohibited.

Anacomp's COM information services competitors include Zytron (a subsidiary of Dun & Bradstreet), Endata Corporation (a subsidiary of First Financial Management Corporation), and hundreds of small, local service bureaus.

Key Products and Services

Approximately 23% ($103.8 million) of Anacomp's fiscal 1988 revenue was derived from its various information services. Approximately $95.4 million was derived from COM and microforms processing services. The remaining $8.4 million was derived from information services businesses which were subsequently sold in late 1988.

COM and microforms services are provided to over 6,000 customers nationwide through 60 data centers.

- COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm. Value-added services provided by Anacomp include customized indexing and retrieval software.

- Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on microfilm) services.

Industry Markets

Anacomp's information services revenue is derived from clients in various industries including financial services, service bureaus, manufacturing, and government.

Geographic Markets

Approximately 78% of Anacomp's fiscal 1988 revenue was derived from the U.S. and 22% was derived from foreign sources.

- One-hundred percent of Anacomp's information services revenue is derived from the U.S.

- Anacomp's foreign revenue is derived from DatagraphiX subsidiaries located in Belgium, France, the Netherlands, The U.K., West Germany, and Canada, several Xidex subsidiaries, and from foreign distributors.

Copyright 1989 by INPUT. Reproduction Prohibited.

Computer Hardware and Software

Anacomp operates 60 COM data centers located in 24 states. The centers use COM hardware, such as that produced by DatagraphiX, to reproduce information from magnetic tapes to 16 mm microfilm or on microfiche.

Copyright 1989 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 3,700
Total Revenue, Fiscal Year End 9/30/87: $277,011,000
Information Services Revenue: $101,776,000

The Company

Anacomp, Inc., founded in 1968, provides computer output microfilm (COM) services to over 6,000 customers nationwide. Other information services provided by Anacomp include remote computing services and turnkey systems for credit unions, data entry services, turnkey systems for state and local governments, and professional services facilities management for the state of Indiana's Bureau of Motor Vehicles.

- As a result of the acquisition of DatagraphiX, Inc. in March 1987 and Consolidated Micrographics, Inc. in June 1987, Anacomp has expanded its offerings to include COM hardware systems, maintenance services for COM and other related hardware, and additional micrographics supplies. These products and services contributed 60% to Anacomp's fiscal 1987 revenue.

Anacomp's business strategy over the past several years has been to focus on expanding its COM product and service offerings. As a result, the company has made the following acquistions and divestitures:

- In March 1987 Anacomp purchased DatagraphiX, Inc. (a wholly owned subsidiary of General Dynamics Corporation) for $128 million.
 - DatagraphiX manufactures COM recorders and related devices, provides maintenance services for its installed base of more than 2,650 COM hardware systems worldwide, and sells micrographics supplies. DatagraphiX also manufactures the A-NEW display device used in the U.S.

Copyright 1988 by INPUT. Reproduction Prohibited.

Navy's P3-C anti-submarine warfare aircraft and by certain foreign governments.

- DatagraphiX had annual revenue of approximately $240 million and 2,500 employees at the time of the acquisition.

- DatagraphiX also marketed and serviced a line of non-impact printers manufactured by others. Effective October 30, 1987, Anacomp sold the printer maintenance contracts and related inventories to NCR Corporation. This business contributed approximately $16.3 million ($7.5 million in services and $8.8 million in equipment and supplies) to Anacomp's fiscal 1987 revenue.

- The operations of DatagraphiX have been merged into Anacomp's Major Products and DatagraphiX MultiproduX (Supplies) Divisions.

- In June 1987 Anacomp purchased Consolidated Micrographics, Inc. (CM), a private company headquartered in Laguna Niguel (CA), for $14.1 million in cash and the assumption of certain liabilities valued at $4.8 million.

 - CM manufactures microfiche duplicators, cameras, and storage/retrieval devices.

 - CM had annual revenues of approximately $30 million and 400 employees at the time of the acquisition.

 - CM's manufacturing operations have been relocated and merged into those of DatagraphiX. Anacomp will continue to manufacture CM's duplicator line along with selected other products.

- Anacomp acquired 13 micrographics service centers during fiscal 1986 and 1985 for a total consideration of approximately $6.4 million. No data center acquisitions were made during fiscal 1987.

- In September 1987 Anacomp sold its Industrial Systems Division to Electronic Data Systems in exchange for future royalty considerations.

 - This division developed and marketed the Purchasing Decision Support appplication software product for industrial users.

Copyright 1988 by INPUT. Reproduction Prohibited.

- Anacomp recorded a $1.8 million loss from this sale in fiscal 1987.

- During 1986 Anacomp adopted a plan to discontinue the operations of its Banking Software Division and its general data processing service division.

 - In July 1986 Anacomp sold its BANKSERV retail banking product line to American Management Systems, Inc for $3.9 million in cash and guaranteed minimum royalties.

 - In August 1986 Anacomp sold its CIS banking software product to Electronic Data Systems for $4.8 million in cash and notes

 - The remaining assets of the Banking Software Division and general data processing service operations were sold or otherwise disposed of by December 31, 1986.

 - These two divisions contributed combined revenue of approximately $6.2 million and $10.3 million, and net losses (after income tax benefit) of approximately $2.4 million and $5.5 million to Anacomp's fiscal 1986 and 1985 results, respectively.

In the five-year financial summary that follows fiscal 1987 results include the operations of DatagraphiX and CM from their respective dates of acquisition. Revenues prior to fiscal 1987 have been restated to reflect continuing operations only.

Copyright 1988 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

	FISCAL YEAR				
ITEM	9/87	9/86	9/85	9/84	6/83
Revenue	277,011	108,920	112,866	115,221	113,090
• Percent increase (decrease) from previous year	154%	(3%)	(2%)	2%	N/A
Income (loss) from continuing operations before taxes and extraordinary items	30,184	8,186	10,086	(35,312)	N/A
• Percent increase (decrease) from previous year	269%	(19%)	450%	N/A	N/A
Net income (loss)	26,510 (a)	4,073 (a)	362 (a)	(116,227)	(3,963)
• Percent increase (decrease) from previous year	551%	*	100%	*	(186%)
Earnings (loss) per share	0.70	0.13	0.02	(9.08)	(0.38)
• Percent increase (decrease) from previous year	438%	550%	100%	*	(179%)

* *Percent change exceeds 1,000%.*

(a) Net income includes extraordinary credits from utilization of tax loss carryforwards of approximately $8.9 million, $2.5 million, and $1.8 million for fiscal 1987, 1986, and 1985, respectively.

Total fiscal 1987 revenue increased more than $168 million over fiscal 1986, with DatagraphiX and CM contributing approximately $150 million of that increase.

- Revenue from Anacomp's various micrographics services increased 13% during fiscal 1987, compared to an 8% growth in fiscal 1986. No data center acquisitions were completed in fiscal 1987, so all current year growth was internally generated.

- Other information services revenue (which includes credit union processing and turnkey systems, data entry services, child support government turnkey sytems, and facilities management services) increased 25% during fiscal 1987, compared to a 33% decrease in fiscal 1986. Declines in 1986 were caused by major contracts expiring without replacement sales.

Copyright 1988 by INPUT. Reproduction Prohibited.

Anacomp management attributes the significant increase in net income in fiscal 1987 to the acquistion of DatagraphiX and CM, as well as internal growth in COM services.

Anacomp's operations are currently organized as follows:

- The COM Services Division and Microforms/Microprinting units provide computer output microfilm, source document microfilming, and micropublishing processing services through 56 data centers located throughout the U.S. These services are provided to a range of industries, including financial services, manufacturing, service bureaus, and government. The COM Services Division has approximately 1,000 employees.

- The Major Products Division was established with the acquisitions of DatagraphiX and CM to manufacture and market COM hardware and related equipment. The Major Products Division has approximately 800 employees.

- The Product Maintenance Division provides hardware maintenance services for the company's COM systems. The division's operations are being extended to include maintenance services for other COM and data processing products. The Product Maintenance Division has approximately 900 employees.

- The DatagraphiX MultiproducX Division (DXMX) markets COM supplies and peripheral equipment through direct sales and catalogs. This division has approximately 80 employees.

- The International Division markets DatagraphiX COM equipment, CM duplicators, and DXMX supplies, and provides maintenance services through six foreign subsidiaries (in Belgium, France, the Netherlands, the U.K., West Germany, and Canada) and 28 foreign distributorships, and provides associated maintenance services. This division has approximately 500 employees.

- The Commercial and Government Services Division, with approximately 100 employees, provides the following information services:

 - The Credit Unions unit provides processing services and turnkey systems to credit unions. This unit contributed approximately $5 million to fiscal 1987 revenue.

 - The Data Services unit provides data entry services to a range of industries, child support turnkey systems to state

Copyright 1988 by INPUT. Reproduction Prohibited.

and local government, and facilities management services to the State of Indiana. This unit contributed approximately $11.2 million to fiscal 1987 revenue.

A three-year summary of source of revenue by business area follows:

ANACOMP, INC.
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
	9/87		9/86		9/85	
ITEM	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Micrographics services	$85.6	31%	$75.9	70%	$70.4	63%
Supplies	72.9	26%	20.0	18%	22.9	20%
Maintenance (a)	49.2	18%	--	--	--	--
COM and printer hardware (a)	45.2	16%	--	--	--	--
Credit union and data services	16.2	6%	13.0	12%	19.5	17%
Other (b)	7.9	3%	--	--	--	--
TOTAL	**$277.0**	**100%**	**$108.9**	**100%**	**$112.8**	**100%**

(a) Maintenance and hardware revenue for fiscal 1987 includes $8.8 million and $7.5 million, respectively, from the maintenance and sale of non-impact printers. This product line was sold to NCR in October 1987.

(b) Other revenue for fiscal 1987 includes A-NEW display device sales.

Anacomp management projects the following growth rates for its various business segments during fiscal 1988:

- A 12-15% increase in revenue from COM and other micrographics services.
- An 8-10% growth in the Major Products Division.
- A 12-15% increase in maintenance revenue.

Copyright 1988 by INPUT. Reproduction Prohibited.

- A 15-20% growth in supply sales.
- A 10-15% growth rate for the Commercial and Government Services Division.
- Anacomp expects approximately 20% of its revenue to come from COM hardware sales and maintenance services provided through its foreign operations.

Revenue for the three months ending December 31, 1987 was $100.7 million a 273% increase over $27 million for the same period in 1986. Net income reached $11.1 million, compared to $2.8 million for the same period a year ago.

- Revenue growth reflects the acquisitions of DatagraphiX and CM during 1987 and strong sales of COM services.
- Comparisons to the fourth quarter of fiscal 1987 show a 14% increase in net income, while total revenue decreased $9.4 million. The revenue decline was due primarily to lower sales of A-NEW systems and reduced non-impact printer sales (a business area that was sold to NCR in 1987).

As of September 1987, Anacomp had approximately 3,700 employees. The company currently has 3,500 employees.

Anacomp's information services competitors, by service area, include the following:

- COM services: Zytron (a subsidiary of Dun & Bradstreet), Endata Corporation (a subsidiary of First Financial Management Corporation), and hundreds of small, local service bureaus.
- Credit union products and services: Electronic Data Systems and Control Data Corporation.
- Child support turnkey systems: ASI and in-house development.
- Facilities management services: Electronic Data Systems.

Key Products and Services

Approximately 37% ($101.8 million) of Anacomp's fiscal 1987 revenue was derived from its various information services. INPUT estimates Anacomp's fiscal 1987 information services revenue was derived approximately as follows:

Copyright 1988 by INPUT. Reproduction Prohibited.

Processing services	90%
Professional services facilities management	8%
Turnkey systems	2%
	100%

Processing services provided by Anacomp include the following:

- COM and microforms services are provided to over 6,000 customers nationwide through 56 data centers.
 - COM services include the transfer of output directly from magnetic tapes prepared on a computer to microfiche or roll microfilm. Value-added services provided by Anacomp include customized indexing and retrieval software.
 - Microforms services consist of the microfilming of both active and archival paper documents. Anacomp provides both source document microfilming (the conversion of paper documents to microfilm) and micropublishing (the reproduction of large data bases on mirofilm) services.
- Anacomp provides on-line processing services to approximately 100 credit unions through computers located at Anacomp's data center in Flint (MI). Services include the transmission of data from terminals at the customers' locations to Anacomp's computer for processing and the furnishing to Anacomp's customers of periodic reports that support their operating, auditing, management, and regulatory requirements.
- Data entry services include key-to-tape, key-to-disc, key-to-memory, and traditional punch card services.

Turnkey systems provided by Anacomp include the following:

- The M-100 is a turnkey system for credit unions. It is a complete transaction processing system based on Datapoint or IBM computers.
 - System prices range from $44,000 to $180,000.
 - There are currently 44 systems installed.
- The Child Support Enforcement System is a Prime-based turnkey system marketed to state and local governments. The system assists in the tracking and enforcement of court-ordered child support payments.

Copyright 1988 by INPUT. Reproduction Prohibited.

- The system is custom priced per client. There are currently four systems installed.

- A major system was installed in the State of Connecticut during fiscal 1987. Other clients include Marion County (IN), Allegheny County (PA), and Jefferson County (KY).

Anacomp provides facilities management services under a contract with the Indiana Bureau of Motor Vehicles. Services provided include the encoding, microfilming, and reporting of motor vehicle registrations handled by the state's bureau branches.

Industry Markets

Anacomp's revenue is derived from clients in various industries including financial services (including credit unions), service bureaus, manufacturing, and government.

Geographic Markets

Approximately 86% of Anacomp's fiscal 1987 revenue was derived from the U.S. and 14% was derived from foreign sources.

- One-hundred percent of Anacomp's information services revenue is derived from the U.S.

- Anacomp's foreign revenue is derived from DatagraphiX subsidiaries located in Belgium, France, the Netherlands, The U.K., West Germany, and Canada, and from foreign distributors.

In addition to its 56 COM data centers, Anacomp has offices in 50 locations, including six foreign locations.

Computer Hardware and Software

Anacomp's data center locations include the following:

- Anacomp operates 56 COM data centers located in 24 states.

- Flint (MI): This center supports Anacomp's credit union processing services on Unisys computers.

Copyright 1988 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 1,700
Total Revenue, Fiscal Year End 9/30/85: $123,117,000
Computer Services Revenue: $100,200,000

THE COMPANY

- Anacomp, Inc., founded in 1968, operates a number of computer output microfilm (COM) and microprinting centers; provides processing services, professional services facilities management, and turnkey systems to financial, commercial, and government institutions; and develops, markets and supports application software products for financial institutions and large industrial users.

- Fiscal 1985 revenue was $123.1 million, a 7% decrease from fiscal 1984 revenue of $131.9 million. Net income was $362,000 compared to a net loss of $116.2 million in fiscal 1984. A five-year financial summary follows:

©1986 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM / FISCAL YEAR	9/85	9/84 (a)	6/83	6/82	6/81
Revenue					
. Services	$ 95,385	$ 95,941	$ 135,293	$ 88,045	$ 87,304
. Equipment sales (b)	27,732	35,961	36,891	21,554	19,064
Total	$ 123,117	$ 131,902	$ 172,184	$ 109,599	$ 106,368
. Percent change from previous year	(7%)	(23%)	57%	3%	48%
Income (loss) before taxes and extraordinary items	$ 1,452	$ (123,709)	$ (11,963)	$ 3,622	$ 13,997
. Percent change from previous year	101%	(934%)	(430%)	(74%)	80%
Net income (loss)	$ 362	$ (116,227) (c)	$ (3,963)	$ 4,609	$ 7,938
. Percent change from previous year	100%	*	(186%)	(42%)	72%
Earnings (loss) per share	$ 0.02	$ (9.08)	$ (0.38)	$ 0.48	$ 0.8
. Percent change from previous year	100%	*	(179%)	(42%)	26%

*Percent change exceeds 1,000%

(a) Changes in the composition of its business and financial structure led Anacomp to conclude that September 30 represented a more natural end to its fiscal year than June 30. Therefore, on August 14, 1984, Anacomp retroactively designated October 1, 1983 as the beginning of its fiscal year 1984.

(b) Equipment sales include micrographics equipment and supplies and hardware sold with turnkey sytems.

(c) Net losses of $116,227,000 for fiscal 1984 include an extraordinary tax-free gain of $9,662,000 resulting from the exchange of 54% of the company's 13-7/8% Convertible Subordinated Debentures for its new 10% Convertible Senior Subordinated Debentures due 1995 and its new $0.75 Convertible Preferred Stock, Series A.

- Anacomp management attributes declines in fiscal 1985 revenue primarily to discontinued business units and the completion in 1984 of a large industrial systems development contract.

©1986 by INPUT. Reproduction Prohibited.

- Items contributing to fiscal 1985 income results include: proceeds in the amount of $1.8 million, net of expenses, from life insurance coverage for former chairman Ronald D. Palamara; $6.3 million in profit from the sale of Anacomp's interest in USA Communications, Inc. in February 1985; write-offs of approximately $5.1 million of intangibles and termination costs as a result of transferring its microfilm reader manufacturing business to another company in July 1985.

- Anacomp management states that fiscal 1985 profits, before the non-recurring loss of $5.1 million on the transfer of the company's microfilm business, were approximately $5.4 million. Profits from the micrographics business, credit union processing operations, and government services unit, combined with organizational changes and reduced operating costs, contributed to positive results for 1985.

- Anacomp management attributes fiscal 1984 revenue declines and net losses primarily to the software services division's significant declines in license fees and development revenue from NCR-based bank and hospital products and IBM-based wholesale and retail bank products.

 . In the fourth quarter of fiscal 1984, Anacomp wrote off assets and established reserves associated with software projects, principally the Continuous Integrated System (CIS). The projects either were not complete or were not yet being marketed. These adjustments totaled approximately $38 million.

 . Disappointing results from December/January tests of CIS forced Anacomp to make significant changes to the data base design and system architecture. In the absence of new license fee payments or development money, the company absorbed the entire cost of these revisions.

 . Anacomp has subsequently decided to no longer develop new software systems unless such development is funded by outside sources. This policy is in effect for various components of CIS. The Customer Information System and Transaction Delivery System components of CIS have been revised and are being marketed independently. The remaining retail banking applications planned for CIS will be completed when and if such development is funded.

 . During fiscal 1984 Anacomp also discontinued work on a wholesale banking software system being developed for the CIBS partnership.

- Revenue from software development agreements with research and development limited partnerships was $71,000 in fiscal 1985, compared to $5 million in fiscal 1984 and $28 million in fiscal 1983.

©1986 by INPUT. Reproduction Prohibited.

- In fiscal 1985 Anacomp reported revenue from two major business segments, as follows:

 - The Data Center Services Group operates 57 centers across the country that perform computer output microfilming (COM), microprinting services, and marketing of micrographic equipment and supplies for over 5,000 customers in a wide range of industries including banking and finance, medical, and manufacturing. This group also provides processing services to credit unions.

 - The Computer Services Group develops, markets, installs, and maintains application software products for the banking and finance industry. This group also provides facilities management professional services for the State of Indiana, general processing and data entry services for government and commercial clients, and turnkey systems for credit unions and government.

- Revenue by major business segment for the last three fiscal years follows ($ thousands):

ITEM \ FISCAL YEAR	9/85	9/84	6/83
Data Center Services			
- Revenue	$ 96,963	$ 93,209	$ 92,380
. Percent increase	4%	1%	37%
- Operating profit*	$ 23,738	$ 17,873	$ 14,308
. Percent increase	33%	25%	68%
Computer Services			
- Revenue	$ 26,154	$ 38,693	$ 79,804
. Percent increase (decrease)	(32%)	(52%)	89%
- Operating profit (loss)*	$ (8,418)	$ (60,902)	$ (4,929)
. Percent increase (decrease)	86%	**	(225%)

* Revenue less costs of services provided; equipment sold; and selling, general and administrative activities (excluding general corporate expenses)

** Percent change exceeds 1,000%

 - Data Center Services results were attributed to micrographic revenue growth, which generated significant profit increases, and a 16% growth in credit union processing revenue.

 - Computer Services results were attributed to continued declines in software revenue resulting from the completion early in the year of the Purchasing Decision Support (PDS) development project for a large

©1986 by INPUT. Reproduction Prohibited.

utility company. Software services losses were $9 million in fiscal 1985, compared to losses of $86 million in fiscal 1984, as Anacomp continued to pursue settlement of its remaining contractual obligations for CIS.

- Acquisitions/divestitures made by Anacomp include the following:
 - Effective October 1, 1985, Anacomp purchased four COM service centers for a total price of less than $2 million.
 - In September 1985 Anacomp acquired three COM service centers from Kalvar Corporation in exchange for Kalvar securities held by Anacomp valued at $2.1 million. In July 1984 Anacomp purchased two COM service centers in Dayton and Denver that it had previously sold to a group of investors in 1982.
 - Effective July 1, 1985 sold its NMI-brand reader manufacturing operations for an annual license fee to Xidex.
 - Effective February 1, 1985 sold the operating assets of its majority-owned subsidiary, USA Communications, Inc., to Outlet Communications, Inc. for $6.7 million.
 - In June 1984 Anacomp sold all the inventory and distribution rights associated with its Microcomputer Distribution division to Western Micro Systems Inc. (Cupertino, CA). Terms of the sale were not disclosed.
 - During 1984 Anacomp sold its Escom commercial systems division to certain employees within the division. Escom marketed software and turnkey systems for manufacturing and distribution management and control.
 - During 1984 Anacomp sold Eikon Radiographix, a provider of X-ray minification services and supplies and radiology management software.
- Revenue for the three months ending December 31, 1985 was $28.3 million, a 10% decrease from $31.5 million for the same period in 1984. Net income was $301,000, as compared to net losses of $2.5 million for the same period a year ago.
- Anacomp's primary competitors by service area include:
 - Banking software products: Hogan Systems, and to a lesser degree, UCCEL, Kirchman Corporation, and Systematics.
 - Credit union services: Electronic Data Systems and Control Data Corporation.

©1986 by INPUT. Reproduction Prohibited.

- BANKSERV 10800 Transaction Switching and Processing System: A.O. Smith, Astradyne, and Quadstar.

- COM data services: Zytron and Kalvar Corporation.

KEY PRODUCTS AND SERVICES

- Anacomp's fiscal 1985 computer services revenue of $100.2 million is estimated by INPUT as follows:

	Percent of Total	Revenue ($ millions)
Processing services		
. Batch (COM)	70%	$70.1
. Remote computing	4	3.9
. Other processing	3	2.8
Subtotal	77%	$76.8
Software products	10%	$10.1
Turnkey systems	5	5.3
Professional services	8	8.0
Total	100%	$100.2

 - The remaining $22.9 million of fiscal 1985 revenue was derived from micrographics equipment and supplies and miscellaneous hardware sales.

- Processing services provided by Anacomp include the following:

 - Computer output microfilm (COM) processing services, conventional microfilming, and micropublishing services are provided from 57 data imaging centers nationwide. The centers also sell micrographic equipment, accessories and supplies, including microfilm and microfilm readers.

 - Anacomp provides on-line processing services to approximately 100 credit unions through computers located at Anacomp's computer center in Flint (MI). Such processing services include the transmission of data from terminals at the customers' locations to Anacomp's computer for processing and the furnishing to Anacomp's customers of periodic reports designed to meet their operating, auditing, management, and regulatory needs.

 - Anacomp offers a range of general data processing services through its IBM-based data center in Indianapolis.

 . Applications available include computer logging and billing functions.

©1986 by INPUT. Reproduction Prohibited.

- Clients include broadcasters, schools, medical organizations, distributors, manufacturers, and services firms.

- Data entry services in a key-to-disk/key-to-tape operating environment are provided to clients located primarily in the Indianapolis area.

- Software products marketed by Anacomp include:

 - BANKSERV Applications, a series of standalone bank application products to handle installment loans, commercial loans, collection management, and credit card accounting. BANKSERV products are now in use at more than 250 banks worldwide.

 - The BANKSERV 1500 Charge Card System is a comprehensive multi-card accounting and on-line processing system designed to help banks manage transaction card business efficiently. There are 60 systems installed.

 - The BANKSERV Instalment Loan Accounting System handles discount/add-on loans, simple interest, variable interest rates, and revolving credit loans. The system processes loans using coupon books, statements, or a combination of both. For variable interest rate processing, floor and ceiling rates are provided with the possibility to tie rates to up to nine external indices. The total system, in addition to Customer Accounting, includes Dealer Reserve Accounting, On-Line Data Entry and Inquiry, Charge-Off Accounting, and Floor Planning. There are 125 installations.

 - The BANKSERV Collection Management System is designed to manage the collection process on an on-line basis for all consumer credit activity, including installment loans, charge cards, or revolving credit. Individual collector's work is organized under priorities established by management. Collector productivity is monitored. The product has 30 installations.

 - The BANKSERV Time Deposit System handles savings, certificates of deposits, time deposit open accounts, and club instruments. The system provides comprehensive reporting on a broad spectrum of time deposit functions and handles IRA and KEOGH account processing as well. It is available on a limited function basis, with a bank being able to use only the segment it desires. There are 30 installations.

 - The BANKSERV Commercial Loan Information System is a comprehensive system for processing commercial loans in single-bank, multi-branch environments. A wide variety of loan types is provided for, with reporting for accounting control, statistical analysis, cash flow projections, and management

©1986 by INPUT. Reproduction Prohibited.

action. The off-line or batch system can be augmented with on-line inquiry and on-line data entry and posting. On-line functions include real-time posting of items once entered via data entry and inquiry to provide immediate access to the updated data base. The Commercial Loan System has 30 installations.

- Corporate Electronic Funds Transfer (CEFT), a wholesale banking software system which automates a bank's wire transfer activities, including the receipt, processing and control of incoming funds transfer messages and the processing, preparation, authorization, control and transmission of outgoing funds transfer messages. CEFT also has real-time funds tracking, control, and reporting capabilities, maintains real-time balances, and generates various reports on funds transfer activities. In 1984 Anacomp purchased CEFT from the research and development limited partnership for which it was developed by Anacomp.

- Customer Service Automation (CSA) automates various branch banking activities, including teller, administrative, automated teller machine and branch operations, and integrates information from branch banks with a bank's central computer system. In 1985 Anacomp purchased the Branch Automation portion of CSA from the research and development limited partnership for which it was developed by Anacomp.

- Customer Integrated/Reference File (CI/RF) provides financial institutions with the capability to access customer-oriented integrated files via an on-line inquiry system. The system is used with NCR Corporation computer equipment in retail banking applications. There are 10 modules: statement savings, club savings, commercial checking, certificates of deposit, high interest saving, installment loan, general ledger, overdraft loans, passbook savings, and personal checking. Major modifications of the CI/RF system have been made to accommodate international banking customers. Anacomp also owns an IBM-based version of CI/RF.

- Continuous Integrated System (CIS). In 1985 Anacomp reduced substantially its efforts to complete the development of an IBM-based system called CIS. The company continues to pursue settlement of its remaining contractual obligations to its CIS customers. Anacomp is seeking outside funding for the completion of CIS development and does not foresee the use of its internal funds in such a development effort. The Customer Information System (CIM) and Transaction Delivery System (TRANMAN) components of CIS have been revised and are being marketed independently.

- Purchasing Decision Support (PDS) is an on-line system for IBM mainframes that handles requisition processing, purchase order creation, and purchase order follow-up. Optional support modules are available for quotations and contracts, receiving and inspection of invoice processing, and inventory control. This product has been

©1986 by INPUT. Reproduction Prohibited.

licensed to a major midwestern utility. Anacomp anticipates that PDS may lead to the marketing and development of related products with manufacturing, utilities, and other industrial companies.

- International Purchasing and Traffic Control (IPT), a system developed for ARAMCO (the Arabian American Oil Company) is designed to handle international procurement, tracking by individual item the movement of all materials throughout the world. The system is being marketed to large multinational corporations.

- Anacomp is no longer actively marketing software for the medical industry.

- Turnkey systems available from Anacomp include the following:

 - The BANKSERV 10800 Transaction Switching and Processing System is a retail banking software system that controls the switching of retail debit and credit card transactions in a multibank environment between their point of origin (automatic teller machines, point-of-sale terminals, or other data entry devices) and the main computer where the customer's account is maintained.

 . The BANKSERV Switch is operating in 14 sites, including many of the nation's leading shared regional and national terminal networks such as the Denver-based Rocky Mountain BankCard System, Maryland Switch, Inc., Manufacturers Hanover Trust, the New Jersey-based "THE TREASURER" shared ATM network, and the Pittsburgh-based Trinet system.

 . Anacomp sells BANKSERV 10800 primarily as a turnkey system running on a Perkin-Elmer 3200.

 . During fiscal 1984, Anacomp introduced a new product, the BANKSERV 10800/LXP. This product is a scaled down version of the system, targeted for smaller networks. The LXP switch allows such institutions to control their own ATM or point of sale networks and is designed to grow with an institution's needs. The system is also based on a Perkin-Elmer computer.

 - The M-100 is a turnkey system for credit unions. It is a complete transactional processing system sold on a Datapoint 8600 or 8800. Price of a system ranges from $80,000 to $250,000. Over 20 systems have been installed.

 - The Child Support Enforcement System is a Prime-based turnkey system marketed to city and county governments. The system tracks delinquent parent payments.

- Professional services (facilities management) contributed about 8% to Anacomp's fiscal 1985 revenue. All of this revenue comes from two contracts performed for the state of Indiana.

©1986 by INPUT. Reproduction Prohibited.

- For the Indiana Department of Revenue, Anacomp provides data entry services to update and maintain state tax return files for business and individual returns.

- For the Indiana Bureau of Motor Vehicles, Anacomp provides for the encoding, microfilming, and reporting of over four million motor vehicle registrations handled by over 100 Indiana Bureau of Motor Vehicle branches.

INDUSTRY MARKETS

- Anacomp's revenue is derived from clients in various industries including banking finance, manufacturing, utilities, distribution, medical, insurance, education, and government.

GEOGRAPHIC MARKETS

- Approximately 90% to 95% of Anacomp's total fiscal 1985 revenue came from the U.S. and 5% to 10% was foreign. The majority of its U.S. clients are concentrated in the East and Midwest.

- In addition to its 57 COM data centers, Anacomp has offices in Indianapolis, Sarasota (FL), and Fort Lee (NJ).

COMPUTER HARDWARE AND SOFTWARE

- Anacomp maintains two data centers. Data center locations and major activities performed at the sites are:

 - Indianapolis (IN): processing for credit unions and bank transaction switching on Perkin-Elmer and Burroughs equipment.

 - Flint (MI): credit union processing on Burroughs equipment.

- Anacomp operates 57 COM data centers located in 24 states.

©1986 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO PROFILE DATED JANUARY 1984

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Louis P. Ferrero, Chairman, President, and CEO
Public Corporation, NYSE
Total Employees: 2,000
Total Revenue, Fiscal Year End 9/30/84: $131,902,000
Computer Services Revenue: $119,000,000*

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

FISCAL YEAR / ITEM	9/84 (a)	6/83	6/82	6/81	6/80
Revenue					
. Services	$ 95,941	$135,293	$ 88,045	$ 87,304	$58,781
. Equipment sales (b)	35,961	36,891	21,554	19,064	12,862
Total	$ 131,902	$172,184	$109,599	$106,368	$71,643
. Percent increase (decrease) from previous year	(23%)	57%	3%	48%	72%
Income (loss) before taxes and extraordinary items	$ (123,709)	$ (11,963)	$ 3,622	$ 13,997	$ 7,787
. Percent increase (decrease) from previous year	(934%)	(430%)	(74%)	80%	54%
Net income (loss)	(c)	$ (3,963)	$ 4,609	$ 7,938	$ 4,627
. Percent increase (decrease) from previous year	(d)	(186%)	(42%)	72%	71%
Earnings (loss) per share	$ (9.08)	$ (0.38)	$ 0.48	$ 0.83	$ 0.66
. Percent increase (decrease) from previous year	(d)	(179%)	(42%)	26%	29%

*INPUT estimate

©1985 by INPUT. Reproduction Prohibited.

(a) Changes in the composition of its business and financial structure led Anacomp to conclude that September 30 represented a more natural end to its fiscal year than June 30. Therefore, on August 14, 1984, Anacomp retroactively designated October 1, 1983 as the beginning of its fiscal year 1984. Financials for the three months ending September 30, 1983 have been reported separately by Anacomp and are shown below ($ thousands, except per share data):

Revenue	$36,087
(Loss) before taxes and extraordinary item	$ 14,414
Net (loss)	$ 14,919
(Loss) per share	$ (1.20)

(b) Equipment sales include micrographics equipment and supplies and hardware sold with turnkey systems.

(c) Net losses of $116,227,000 for fiscal 1984 include an extraordinary tax-free gain of $9,662,000 resulting from the exchange of 54% of the company's 13-7/8% Convertible Subordinated Debentures for its new 10% Convertible Senior Subordinated Debentures due 1995 and its new $0.75 Convertible Preferred Stock, Series A.

(d) Percent change exceeds 1,000%.

- Anacomp management attributes revenue declines and net losses primarily to the software services division's significant declines in license fees and development revenue from NCR-based bank and hospital products and IBM-based wholesale and retail bank products.

 - In the fourth quarter of fiscal 1984, Anacomp wrote off assets and established reserves associated with software projects, principally the Continuous Integrated System (CIS). The projects either were not complete or were not yet being marketed. These adjustments totaled approximately $38 million.

 - Disappointing results from December/January tests of CIS forced Anacomp to make significant changes to the data base design and system architecture. In the absence of new license fee payments or development money, the company absorbed the entire cost of these revisions.

 - Anacomp has subsequently decided to no longer develop new software systems unless such development is funded by outside sources. This policy is in effect for various components of CIS. The Customer Information System and Transaction Delivery System components of CIS have been revised and are being marketed independently. The remaining retail banking applications planned for CIS will be completed when and if such development is funded.

©1985 by INPUT. Reproduction Prohibited.

- During fiscal 1984 Anacomp also discontinued work on a wholesale banking software system being developed for the CIBS partnership.

- During 1984 Anacomp sold certain non-profit-producing assets and other operations as follows:

 - In June 1984 Anacomp sold all the inventory and distribution rights associated with its Microcomputer Distribution division to Western Micro Systems Inc. (Cupertino, CA). Terms of the sale were not disclosed.

 - Anacomp sold its Escom commercial systems division to certain employees within the division. Escom marketed software and turnkey systems for manufacturing and distribution management and control.

 - Anacomp sold Eikon Radiographix, a provider of X-ray minification services and supplies and radiology management software.

 - In late 1984 the company sold the substantial assets of its majority-owned subsidiary, USA Communications Inc., to Outlet Communications, Inc. for approximately $22 million in cash. This sale is expected to yield Anacomp approximately $7 million in cash and profits during fiscal 1985.

- Effective July 1, 1984, Anacomp purchased two COM service centers in Dayton (OH) and Denver (CO) that it previously sold to a group of private investors in 1982.

- Revenue for the three months ending December 31, 1984 was $31.5 million, a 9% decrease from revenue of $34.8 million for the same period in 1983. Net losses were $2.5 million, as compared to $37.1 million for the same period a year ago.

©1985 by INPUT. Reproduction Prohibited.

SOURCE OF REVENUE

- Revenue by major business segment for the last three fiscal years follows:

ITEM \ FISCAL YEAR	9/84	6/83	6/82
Data Center Services			
- Revenue	$ 93,209	$ 92,380	$ 67,418
. Percent increase (decrease)	1%	37%	(1%)
- Operating profit*	$ 17,873	$ 14,308	$ 8,504
. Percent increase	25%	68%	17%
Computer Services			
- Revenue	$ 38,693	$ 79,804	$ 42,181
. Percent increase (decrease)	(52%)	89%	10%
- Operating profit (loss)*	$ (60,902)	$ (4,929)	$ 3,947
. Percent increase (decrease)	(1,136%)	(225%)	(64%)

* Revenue less costs of services provided; equipment sold; and selling, general and administrative activities (excluding general corporate expenses).

- Anacomp's fiscal 1984 computer services revenue of $119 million is estimated by INPUT as follows:

	Percent of Total	Revenue ($ millions)
Processing services		
. Batch (COM)	67%	$ 79
. Remote computing	3	4
. Other processing	3	4
Subtotal	73%	$ 87
Software products	11%	$ 13
Turnkey systems	10	12
Professional services	6	7
Total	100%	$ 119

- The remaining $12.9 million of fiscal 1984 revenue was derived from micrographics equipment and supplies and miscellaneous hardware sales.

©1985 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

ANACOMP, INC.
11550 North Meridian Street
P.O. Box 40888
Indianapolis, IN 46240
(317) 844-9666

Ronald D. Palamara, Chairman and President
John J. Flanigan, Chief Operating Officer
Public Corporation, NYSE
Total Employees: 2,700
Total Revenue, Fiscal Year End 6/30/83: $172,184,000
Computer Services Revenue: $154,000,000*

THE COMPANY

- Anacomp, founded in 1968, is a major developer of software products for the banking industry; provides processing and professional services to financial, commercial, and government institutions; and operates a number of computer output microfilm and microprinting centers. Past growth has come from an aggressive strategy to acquire companies in key markets. Future growth depends upon the successful marketing and completion of several multi-million dollar development projects for a new line of real-time retail, wholesale, and international banking software based on IBM equipment.

- Fiscal 1983 revenue of $172.2 million showed a 57% growth rate from the previous year. Significant losses were incurred in income and earnings as shown in the five-year financial summary on the following page.

- The 57% revenue increase (or $62.6 million) in fiscal 1983 was attributed to two major factors:

 - Software services revenue increased $37.6 million primarily due to income from development fees from limited partnerships formed in 1983 and secondarily from license fees for a software system owned by Anacomp.

 - Data center (primarily micrographics) revenue increased approximately $25 million due to the effects of two acquisitions, one included for the first time in 1983, the other for the full period in 1983.

*INPUT estimate

© 1984 by INPUT. Reproduction Prohibited.

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	6/83	6/82	6/81 (a)	6/80 (a)	6/79 (a)
Revenue					
. Services	$135,293	$ 88,045	$ 87,304	$58,781	N/A
. Equipment sales(b)	36,891	21,554	19,064	12,862	N/A
Total	$172,184	$109,599	$106,368	$71,643	$41,662
. Percent increase from previous year	57%	3%	48%	72%	78%
Income (loss) before taxes	$ (11,963)	$ 3,622	$ 13,997	$ 7,787	$ 5,045
. Percent increase (decrease) from previous year	(430%)	(74%)	80%	54%	59%
Net income (loss)	$ (3,963)	$ 4,609(c)	$ 7,938	$ 4,627	$ 2,704
. Percent increase (decrease) from previous year	(186%)	(42%)	72%	71%	75%
Earnings (loss) per share	$ (0.38)	$ 0.29	$ 0.83	$ 0.66	$ 0.51
. Percent increase (decrease) from previous year	(231%)	(65%)	26%	29%	31%

(a) Financials for fiscal years 1979 through 1981 have been restated to include the results of companies acquired in transactions accounted for as pooling of interests.

(b) Equipment sales include micrographics equipment and supplies and hardware sold with turnkey systems.

(c) Includes an extraordinary credit from the sale of a branch office that was acquired in 1981 as part of an acquisition accounted for as a pooling of interests. The gain was $2.5 million before income taxes.

- Anacomp's fiscal 1983 losses are attributed to a combination of factors.
 - A significant revenue shortfall occurred in the fourth quarter when Anacomp could not sign new license agreements for its Continuous Integrated System (CIS) and other software products.
 - Anacomp increased its expenditures for research and development of several banking projects, costs not covered by limited partnerships, to bring them back on schedule.

© 1984 by INPUT. Reproduction Prohibited.

- Interest expenses were higher due to increases in bank borrowings of approximately $20 million and a full year of interest paid on the 13-7/8% convertible debentures issued in January 1982. These were offset by a reduction in interest expense from the call for redemption in March 1983 of the 9-1/2% convertible subordinated debentures issued in fiscal 1981. The net effect was a $5.6 million increase in interest expense.

- Other factors included a write-off of deferred costs as a result of the failure to complete funding of a major hospital software development project and adjustments to physical inventories and receivables.

- In order to understand Anacomp's current financial situation, it is necessary to go back several years. Before 1981 Anacomp acquired 24 companies; the company leveraged itself considerably to acquire firms in all areas of computer services. Anacomp's compounded revenue growth rate between fiscal 1969 and 1981 averaged 82% annually. From 1973 on, profits steadily rose with the exception of fiscal years 1982 and 1983.

 - In 1979 Anacomp recognized an opportunity to develop, at a cost of $12 million or more, a new generation of banking software using IBM-based hardware. With only $10 million in net worth at the time, funding for the $12 million-plus project could not be obtained from traditional sources.

 - In order to fund the project, Anacomp established the first of several limited partnerships. Funding for the development projects comes from initial capital raised from investors in the partnerships and primary development banks (PDBs). The PDBs provide capital and experienced staff members to work on the projects, and function as beta test sites for software and operational checkout of the systems. Near completion of the product development cycle, Anacomp can solicit additional banks to join advisory development bank (ADB) programs, which contribute a preestablished amount of money to have a task force review the software documentation and, if the product passes this initial screening, order installation of the product.

 . As an example, the limited partnership for CIS raised $7.5 million, the four PDBs contributed $1.5 million each, 20 ADBs committed $150,000 each, and six others banks were placed in a second-tier ADB program.

 . All products developed become the property of the partnership. Anacomp has options to purchase the products, but is under no obligation to exercise the option.

 - Since the initial sale of the CIS system, Anacomp formed five other partnerships to assist in funding the development of other software products. The status of these partnerships is presented in Exhibit A.

© 1984 by INPUT. Reproduction Prohibited.

EXHIBIT A

ANACOMP'S LIMITED R&D PARTNERSHIPS

PARTNERSHIP NAME	YEAR FORMED	INITIAL ANACOMP MANAGEMENT OWNERSHIP	PRODUCT DESCRIPTION	PARTNERSHIP CAPITAL RAISED ($ MILLIONS)	PRIMARY DEVELOPMENT BANK CAPITAL RAISED ($ MILLIONS)	COMMENTS
RTS Associates	1979	39%	CIS (Continuous Integrated System) for retail banking	$ 7.5	$ 6.0	Anacomp purchased for $16 million in 1982. Development status: some modules ready, others are behind schedule. Unsigned orders in fourth quarter, 1983, were caused by not delivering enhancements.
EFT Partners, Ltd.	1980	28%	BANKSERV 10800, a transaction switching and processing system	$ 1.0	0	Anacomp subsidiary, Kranzley & Co., purchased for $2.3 million in 1982. Development status: product completed and successfully being sold. Installed at 14 sites.
CEFT Partners, Ltd.	1980	9%	CEFT (Corporate Electronic Funds Transfer)	$ 2.0	$ 2.0	Development status: product completed, installed at one site.
CBS Partners, Ltd.	1981	23%	CDA (Corporate Deposit Analysis) for cash management	$ 4.5	$ 3.8	Development status: product completed, installed at one test site.
CIBS Partners, Ltd.	1982	7%	CIBS (Corporate International Banking System)	$26.25	$ 5.0	Development status: under development. Expected date of completion: 1985.
CSA Partners, Ltd.	1983	0	CSA (Customer Service Automation)	$ 6.15	$ 2.2	Development status: under development. Expected date of completion: 1984.
				$47.4	$19.0	

January 1984
© 1984 by INPUT. Reproduction Prohibited.

- There has been considerable press coverage concerning Anacomp's limited partnerships and even a lawsuit by an Anacomp stockholder. Criticisms and the lawsuit have been:

 . Officers of the company have made substantial gains in their investments in the partnerships, raising conflict-of-interest issues.

 . Anacomp has been criticized for its acquisition accounting methods and use of percentage-completion revenue recognition. In a related issue in August 1983, the Securities and Exchange Commission imposed a moratorium on the capitalization of software development costs by companies that had not previously reported the use of this accounting method. Authoritative guidelines are currently under study by the FASB. The moratorium does not require any change in Anacomp's accounting policies, pending the results of the FASB study. If such costs had been expensed as incurred, net loss and net loss per share for Anacomp in fiscal 1983 would have been $15.8 million or $1.50 per share.

 . The lawsuit filed by a stockholder was settled in the plaintiff's favor. Anacomp paid $350,000 in settlement fees and agreed to open future R&D partnerships for investment to its shareholders.

- Although some aspects of the partnerships are worthy of being scrutinized and Anacomp's financials may be affected negatively in the future if accounting methods have to be changed, one has to admire the company's aggressiveness and entrepreneural spirit in raising R&D funds. Anacomp did manage to raise nearly $70 million for new software product development.

- For the three months ended September 30, 1983, Anacomp posted revenue of $36.3 million and a net loss (including no tax benefits) of $11.97 million, or $0.97 per share (both primary and fully diluted), compared to revenue of $48.5 million and net income of $1.9 million, or $0.20 per share ($0.19 fully diluted) in last year's first quarter. Losses were attributed to the delay in getting CIS to the marketplace.

- As of late January 1984 Anacomp was technically in default of its outstanding bank loans of $44.6 million. The company is continuing negotiations with its lender banks concerning a loan restructuring and increase under its Bank Credit Agreement and the removal of existing defaults, but it has not, at the time of publication, reached a new agreement.

- The short-term growth potential of Anacomp will depend upon the successful completion, implementation, marketing, and acceptance of its banking products. Return to profitability may not happen for some time because of the complexity of the tasks. The upside potential is great - a $12.5 billion

© 1984 by INPUT. Reproduction Prohibited.

worldwide banking software/services market, by Anacomp estimates. If successful, Anacomp will emerge as the leading supplier of banking software products. However, the company's future is uncertain in view of its current financial problems.

- In fiscal 1983 Anacomp reported revenue from two major business segments, Computer Services and Data Center Services.

 - The Computer Services Group develops, markets, installs, and maintains computer software for applications in retail/wholesale/international banking and electronic funds transfer, state and local government, manufacturing, distribution, and health care institutions. Facilities management services and minicomputer/microcomputer-based turnkey systems are also marketed.

 - The Data Center Services Group operates 57 centers across the country that perform computer output microfilming (COM), microprinting services, and marketing of micrographics equipment and supplies to financial institutions and other major computer users. The group also provides processing services and turnkey systems for credit unions.

- Revenue by major business segment for the last three years follows:

ANACOMP, INC.
REVENUE BY BUSINESS SEGMENT
($ thousands)

ITEM / FISCAL YEAR	6/83	6/82	6/81
Data Center Services			
- Revenue	$92,380	$67,418	$67,899
. Percent increase (decrease)	37%	(1%)	59%
- Operating profit*	$14,308	$ 8,504	$ 7,294
. Percent increase	68%	17%	25%
Computer Services			
- Revenue	$79,804	$42,181	$38,469
. Percent increase	89%	10%	33%
- Operating profit (loss)*	$ (4,929)	$ 3,947	$10,897
. Percent increase (decrease)	(225%)	(64%)	138%

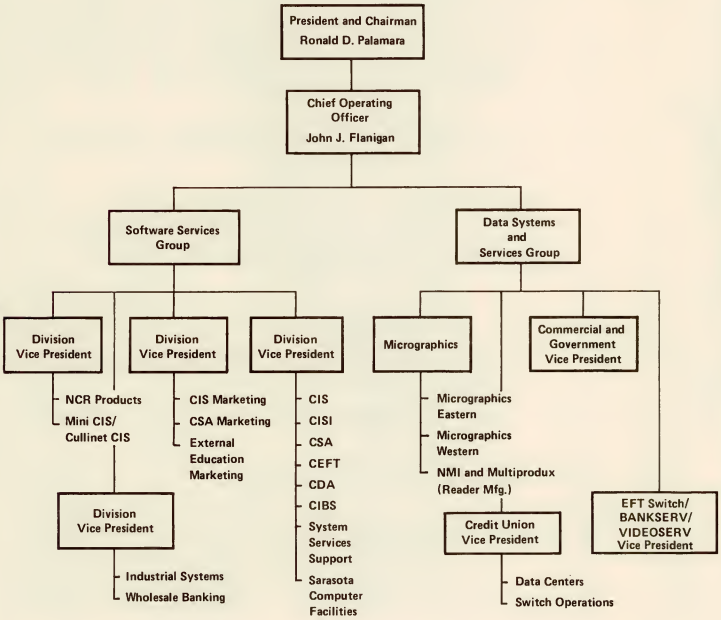
* Revenue less costs of services provided, equipment sold, and selling, general and administrative activities (excluding general corporate expenses).

- In July 1983, the beginning of its new fiscal year, Anacomp reorganized its operations. The new organizational structure is presented in Exhibit B.

© 1984 by INPUT. Reproduction Prohibited.

EXHIBIT B

ANACOMP ORGANIZATIONAL CHART



© 1984 by INPUT. Reproduction Prohibited.

- Acquisitions completed by Anacomp since 1982 follow.
 - The purchase of 92% of the outstanding shares of DSI Corporation for $18.4 million in cash was completed in May 1982. DSI operates COM service centers in various locations throughout the country and had sales of about $44 million in 1981. Prior to the closing of the purchase of the DSI shares, DSI disposed of certain of its centers in order to resolve objections raised by the Department of Justice concerning the acquisition. Certain of the centers were sold by DSI to Kalvar Corporation, and as a part of this transaction, Anacomp also acquired two COM centers from Kalvar. In July 1982 DSI was merged into a wholly owned subsidiary of Anacomp. The merger required a payment of approximately $1.5 million for the remaining shares of DSI.
 - In June 1982 Anacomp exercised its options and purchased the software systems developed for two of its limited partnerships, RTS Associates (CIS) and EFT Partners (BANKSERV 10800). Purchase prices were $16 million and $2.3 million, respectively.
 - Computer Management Group, Inc. (CMG), based in Indianapolis, was purchased for 70,000 shares of Anacomp common stock valued at $770,000 in August 1982. CMG provides processing services, professional services, and minicomputer hardware sales. Annual revenue prior to the acquisition was over $7 million.
 - Anacomp completed the purchase of the NMI reader manufacturing division of Kalvar for $4.4 million in August 1982.
 - In May 1983 Anacomp purchased the assets of two companies providing COM services in Miami and Orlando (FL) for $822,000, consisting principally of 34,750 shares of Anacomp stock.
- A previous agreement in principle to acquire Astradyne Computer Industries Inc. was terminated in July 1982.
- In January 1984 Anacomp sold its on-line bank processing services to NCR Data Services. Terms of the sale were not disclosed.
- In October 1983 Anacomp's wholly owned subsidiary, Info Optics, Inc., filed a registration statement with the Securities and Exchange Commission covering 2.1 million of its common shares, all of which were intended to be sold by Anacomp for its account. The shares constitute approximately 26% of the outstanding shares of Info Optics, Anacomp's micrographics operations. The registration is pending and, most likely, will not be completed. Anacomp is attempting to reduce its financial indebtness through loan restructuring of its long-term debt rather than sell off part of its largest business unit.

© 1984 by INPUT. Reproduction Prohibited.

- Competitors of Anacomp are:
 - Banking software products: Hogan Systems, and to a lesser degree, University Computing, Kirchman Corporation, and Systematics.
 - Credit union services: Electronic Data Systems and Control Data Corporation.
 - BANKSERV 10800 Transaction Switching and Processing System: A.O. Smith, Astradyne, and Quadstar.
 - COM data services: Zytron and Kalvar Corporation.

KEY PRODUCTS AND SERVICES

- Anacomp's fiscal 1983 computer services revenue of $154 million is estimated by INPUT as follows:

	Percent of Total	Revenue ($ millions)
Processing services		
. Batch (COM)	42%	$ 65.0
. Remote computing	9	13.0
Subtotal	51%	$ 78.0
Software products	32%	$ 49.0
Turnkey systems	12	19.0
Professional services	5	8.0
	100%	$154.0

 - The remaining $18.2 million of fiscal 1983 revenue comes from micrographics equipment and supplies.

- The IBM-based banking software products marketed or in development by Anacomp operate on IBM 370, 4300, and 3000 Series equipment under various DOS and OS environments.
 - The Continuous Integrated System (CIS), Anacomp's flagship banking product, is a real-time retail, wholesale, international, and electronic funds transfer banking system that can function 24 hours a day, seven days a week, posting transactions as they are received. Receipt of the transactions may be from both on-line and off-line sources in either interactive or batch modes. The system enables a user bank to process a much higher transaction volume by spreading the data processing load over a 24-hour period and provides a bank with a complete report of all banking relationships with a retail customer.
 - Application modules available or planned with CIS include:
 - Demand deposits.
 - Time deposits: savings, certificates, and clubs.

© 1984 by INPUT. Reproduction Prohibited.

- Installment loans.
- Mortgage loans.
- Open-end credit.
- Revolving credit.
- Commercial loans.
- Loan application processing.
- Earnings management system.
- Due from/due to accounting.

. Marketing efforts are currently focused on 200 to 300 domestic banks with assets in excess of $1 billion. License fees vary, but start around $1.2 million and can range up to $5 million. An average sale is $1.5 million.

. Primary development banks participating in the project are Provident National, Shawmut, National Westminster Bank, and First National Bank of Kansas City. Other licenses have been signed with 12 additional banks. CIS is now being tested in seven major banks.

. CISI is an international version of CIS.

. In May 1983 Anacomp and Cullinet Software signed an agreement to jointly develop and market a new version of CIS intended for mid-tier financial institutions (financial institutions with assets in the $300 million to $1 billion range). The planned version will be an integrated retail banking system built on Cullinet's IDMS data base management system and decision support software products. The development project is currently on hold.

- The BANKSERV 1500 Charge Card System is a comprehensive multicard accounting and on-line processing system designed to help banks manage transaction card business efficiently.

. The system includes a series of bank card processing subsystems available on a totally integrated basis or as individual, standalone modules designed to perform functions for:

- Cardholder Accounting, which allows a card issuer or processing entity to handle multiple banks and dual (VISA and MasterCard) processing.

- Merchant Accounting, for single or multibank operations, provides for dual (VISA and MasterCard) deposits and allows the bank to offer the merchant several alternative ways to handle discount calculations and deposits.

- On-line Extensions provides for full control of a charge card operation, including credit authorization, alphabetic inquiry, and non-monetary data entry.

© 1984 by INPUT. Reproduction Prohibited.

- Price of BANKSERV 1500 ranges from $90,000 to $200,000. There are 60 systems installed.

- The BANKSERV 10800 Transaction Switching and Processing System is a retail banking software system that controls the switching of retail debit and credit card transactions in a multibank environment between their point of origin (automatic teller machines, point-of-sale terminals, or other data entry devices) and the main computer where the customer's account is maintained.

 - The BANKSERV Switch is operating in 14 sites, including many of the nation's leading shared regional and national terminal networks such as the Denver-based Rocky Mountain BankCard System, Maryland Switch, Inc., Manufacturers Hanover Trust, the New Jersey-based "THE TREASURER" shared ATM network, and the Pittsburgh-based Trinet system.

 - Anacomp sells BANKSERV 10800 primarily as a turnkey system and has it installed at its Indianapolis data center.

 - Price of a BANKSERV 10800 turnkey system ranges from $500,000 to $800,000. It is sold on a Perkin Elmer 3200.

- The BANKSERV Instalment Loan Accounting System handles discount/add-on loans, simple interest, variable interest rates, and revolving credit loans. The system processes loans using coupon books, statements, or a combination of both. For variable interest rate processing, floor and ceiling rates are provided with the possibility to tie rates to up to nine external indices. The total system, in addition to Customer Accounting, includes Dealer Reserve Accounting, On-Line Data Entry and Inquiry, Charge-Off Accounting, and Floor Planning. Price of BANKSERV Instalment Loan ranges from $46,000 to $61,000. There are 125 installations.

- The BANKSERV Collection Management System is designed to manage the collection process on an on-line basis for all consumer credit activity, including installment loans, charge cards, or revolving credit. Individual collectors' work is organized under priorities established by management. Collector productivity is monitored. The product sells for $95,000 and has 30 installations.

- The BANKSERV Time Deposit System handles savings, certificates of deposits, time deposit open accounts, and club instruments. The system provides comprehensive reporting on a broad spectrum of time deposit functions and handles IRA and KEOGH account processing as well. It is available on a limited function basis, with a bank being able to use only the segment it desires. Price of the system ranges from $29,000 to $53,000. There are 30 installations.

© 1984 by INPUT. Reproduction Prohibited.

- The BANKSERV Commercial Loan Information System is a comprehensive system for processing commercial loans in single-bank, multi-branch environments. A wide variety of loan types is provided for, with timely and meaningful reporting for accounting control, statistical analysis, cash flow projections, and management action. The off-line or batch system can be augmented with on-line inquiry and on-line data entry and posting. On-line functions include real-time posting of items once entered via data entry and inquiry to provide immediate access to the updated data base. The Commercial Loan System is priced from $29,000 to $43,000 and has 30 installations.

- The Corporate Electronic Funds Transfer (CEFT) system is a wholesale banking software system that automates a bank's wire transfer activities, including the receipt, processing, and control of incoming funds transfer messages and the processing, preparation, authorization, control, and transmission of outgoing funds transfer messages. CEFT also has real-time balances and generates various reports on funds transfer activities. CEFT sells for about $400,000 and is installed at one site.

- The Corporate Deposit Analysis (CDA) system is a wholesale banking product designed to automate a bank's depository relationships with large corporations and other financial institutional customers. CDA provides on-line access to deposit account data and facilitates automatic funds transfer to minimize amounts maintained in non-interest bearing accounts. Price of CDA is $500,000.

- IBM-based banking products still in development are:

 . The Customer Service Automation (CSA), designed to automate various branch banking activities including teller, administrative, automated teller machines, and branch operations. CSA will integrate information from branch banks with a bank's central computer system.

 . The Corporate International Banking System (CIBS), which assists in the management of a bank's acquisition and disposition of funds, including its foreign exchange operations. It maintains and integrates credit and loan information on a bank's large customers; assists in managing and processing loans to large customers; and automates the processing of letters of credit and documentary credit collections.

 . The VIDEOSERV Home Information and Processing System, which will address specific home banking applications required by the financial marketplace served by Anacomp. An agreement was signed with IBM making Anacomp the first value-added remarketer in the U.S. for the IBM SVS/1 Videotex System based on the IBM Series/1 computer.

© 1984 by INPUT. Reproduction Prohibited.

- The value of the equipment and software to be marketed under the agreement is expected to exceed $15 million over the next two and one-half years.

- Anacomp will use its BANKSERV 10800 Transaction Switching and Processing System, integrated with the videotex technology provided by IBM's SVS/1, as the basis for VIDEOSERV.

- The product is expected to be released during calendar 1984.

- Other software products and/or turnkey systems marketed by Anacomp include the following:

 - Manufacturing Management and Control (MMC) is a planning and financial control package for small- and medium-sized manufacturers. Basic modules available are engineering, order processing, purchasing, inventory planning, shop floor control, work order launching, work and process costing, accounts receivable, accounts payable, payroll, and general ledger. MMC is available as a licensed software product for about $40,000.

 - DISTRIBUTE is a financial package for wholesalers and distributors. Available modules include: order tracking, back-order processing, inventory control, accounts payable and receivable, payroll, and general ledger. DISTRIBUTE is available as a licensed software product and sells for about $15,000.

 - Customer Integrated/Referenced File (CI/RF) integrates all client accounts into a single file. There are 10 modules: statement savings, club savings, commercial checking, certificates of deposit, high interest saving, installment loan, general ledger, overdraft loans, passbook savings, and personal checking. CI/RF operates on NCR Century and Criterion systems. Pricing of the software varies.

 - Purchasing Decision Support (PDS) System is an on-line system that speeds the handling of requisition processing, purchase order creation, and purchase order follow-up. Optional support modules are available for quotations and contracts, receiving and inspection of invoice processing, and inventory control. PDS runs on IBM computers. Pricing of the software product varies.

 - The M-100 is a turnkey system for credit unions. It is a complete transactional processing system sold on a Datapoint 8600 or 8800. Price of a system ranges from $80,000 to $250,000. Approximately 15 to 20 have been installed.

 - The R_xNet Pharmacy System is a software product that links individual retail pharmacies with standalone equipment via an electronic mail

© 1984 by INPUT. Reproduction Prohibited.

system to a host computer at either the wholesaler site or chain headquarters. Pharmacies can use the system for stock inquiries, order entry, return authorizations, price updating sales bulletins, and access to a drug interaction data base.

 - R_xNet operates on an Onyx 8000 microcomputer at the pharmacy site. Software pricing varies.

- A turnkey system, based on Prime computers, is being marketed for city and county governments. Available software modules include Property Appraisal, Property Record/Tax Billing and Collection, Child Support Prosecution/Collection, Municipal Courts System, Civil and Criminal Courts System, Voter Registration/Jury Selection System, Law Enforcement Records Management, Fleet Management and Inventory, Document Recording and Indexing, Government Accounting and Management, and Payroll and Personnel.

 - Targeted cities and counties are those with populations of 20,000 to 250,000.

 - Price of a system varies widely depending on the modules selected and the amount of customization required.

- Anacomp provides processing services to credit unions from a data center in Indianapolis and a regional center in Flint (MI). The Indianapolis center also provides processing services using its BANKSERV 10800 switching system.

 - The primary application used for credit unions is a modified version of CI/RF that provides savings, share drafts, loan, and other applications. Most clients are small- and medium-sized credit unions.

 - During 1984 Anacomp began processing transactions for the NATIONET national automated teller machine network and will provide processing for several other regional networks such as Magic Line (Michigan) and ACCESS Banking Network (Toronto) using its BANKSERV 10800 Transaction Switching and Processing System.

- Professional services (facilities management) contributed about 5% of Anacomp's fiscal 1983 computer services revenue. All of this revenue comes from two contracts performed for the state of Indiana.

 - For the Indiana Department of Revenue, Anacomp updates and maintains state tax return files for business and individual returns.

 - For the Indiana Bureau of Motor Vehicles, Anacomp provides for the encoding, microfilming, and reporting of over four million motor vehicle registrations handled by over 100 Indiana Bureau of Motor Vehicle branches.

© 1984 by INPUT. Reproduction Prohibited.

- Computer output microfilm (COM) processing services, conventional microfilming, and micropublishing services are provided from 57 data imaging centers nationwide. The centers also sell micrographic equipment, accessories and supplies, including microfilm and microfilm readers.

INDUSTRY MARKETS

- Anacomp's industry market revenue was segmented approximately as follows in fiscal 1983:

Banking and financial institutions	50%
Government (state, local, and federal)	10
Commercial*	40
	100%

* Includes manufacturing, utilities, distribution, medical, insurance, and education.

GEOGRAPHIC MARKETS

- Approximately 90% to 95% of Anacomp's total fiscal 1983 revenue came from the U.S., and 5% to 10% was foreign. The majority of its U.S. clients are concentrated in the East and Midwest.

COMPUTER HARDWARE AND SOFTWARE

- Anacomp maintains three data centers. Data center locations and major activities performed at the sites are:
 - Indianapolis (IN): processing for credit unions and bank transaction switching on Perkin Elmer and Burroughs equipment.
 - Flint (MI): credit union processing on Burroughs equipment.
 - Sarasota (FL): software development site using IBM equipment.
- Anacomp operates 57 COM data centers located in 24 states.

© 1984 by INPUT. Reproduction Prohibited.

Jim Rosenfeld
Dir. Corp. Commun.

COMPANY PROFILE

ANACOMP, INC.
11550 North Meridian Street
Suite 600
Carmel, IN 46032
(317) 844-9666

Ronald D. Palamara, President
and Chairman of the Board
Public Corporation, OTC
Total Employees: 1,800
Total Revenues, Fiscal Year End
6/30/80: $67,076,000

THE COMPANY

- Anacomp was founded in 1968 in Indiana by a group of professors and consultants from Purdue University. Its original business involved creating and marketing instruction tapes and cassettes and providing some on-line data processing services. It has operated as a public company since 1969.

- Through an aggressive acquisition program, Anacomp has expanded its services to include software development, on-line processing services, facilities management, micrographics services, professional services and turnkey systems. These are offered primarily to the financial community, state and local governments and commercial clients.

- Anacomp reported fiscal 1980 revenues of $67,076,000, a 76% increase over 1979 revenues of $38,118,000. Anacomp's five-year compounded annual growth rate has been 51%. A five-year financial summary follows:

ANACOMP, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ Thousands, Except Per Share Data)
(FYE 6/30)

ITEM / FISCAL YEAR	1980	1979	1978	1977	1976
Revenues	$67,076	$38,118	$21,619	$16,183	$12,851
. Percent increase from previous year	76%	76%	34%	26%	44%
Income before taxes and extraordinary item	$ 8,130	$ 5,072	$ 3,177	$ 2,454	$ 1,575
. Percent increase from previous year	60%	60%	29%	56%	52%
Net income	$ 4,810	$ 2,653	$ 1,558	$ 1,192	$ 835
. Percent increase (decrease) from previous year	81%	70%	31%	43%	(5%)
Earnings per share	$ 0.96	$ 0.75	$ 0.53	$ 0.41	$ 0.26
. Percent increase (decrease) from previous year	28%	42%	29%	58%	(6%)

©1981 by INPUT. Reproduction Prohibited.

- In 1980, Anacomp grew through both acquisition and internal expansion.
 - Acquisitions accounted for $24.6 million, or 85% of 1980 revenue growth. The largest acquisition was Computer Micrographics, Inc., which contributed $16.2 million. Internal expansion accounted for $4.4 million, or 15% of Anacomp's 1980 revenue increase. Growth in banking software system contracts added $5.0 million in revenues, while other areas contributed $3.8 million. This was offset by the termination of an agreement to market microfilm manufactured by Kalvar Corporation, which resulted in a decrease of $4.4 million in revenues.
- Anacomp is divided into two general business areas, Computer Services and Micrographics.
 - Computer Services revenues, which include all software, professional services, facilities management and data processing, grew 52% in 1980 to $43.7 million. It's five-year compounded growth rate has averaged 44%. Pre-tax profits from Computer Services were 10% in 1980.
 - Micrographics revenues, which include computer output microfilm, microfilming and micropublishing, grew 148% in 1980 to $23.3 million. Its average compounded growth rate for the last five years has been 72%. Micrographics contributed 47% of Anacomp's income before taxes, and recorded pre-tax profits of 16%.
- A five-year summary of Anacomp's revenues and pretax income by business segment follows:

ANACOMP
REVENUE BY BUSINESS SEGMENT
($ Thousands, FYE 6/30)

ITEM / FISCAL YEAR	1980	1979	1978	1977	1976
Computer Services					
. Revenues	$43,743	$28,709	$12,525	$11,047	$10,190
- Percent of total revenues	65%	75%	58%	68%	79%
. Income before taxes	$ 4,292	$ 3,147	$ 2,566	$ 1,873	$ 1,282
- Percent of total income	53%	62%	81%	76%	81%
Micrographics					
. Revenues	$23,333	$ 9,409	$ 9,094	$ 5,136	$ 2,661
- Percent of total revenues	35%	25%	42%	32%	21%
. Income before taxes	$ 3,838	$ 1,925	$ 611	$ 581	$ 293
- Percent of total income	47%	38%	19%	24%	19%

©1981 by INPUT. Reproduction Prohibited.

- For the six months ending December 31, 1980, Anacomp reported revenues of $49.8 million and net income of $3 million, an increase of 66% and 89% respectively from the previous year. (Previously reported financial results have been restated to reflect two acquisitions completed in the last quarter of 1980 which were accounted for on the pooling of interests basis.) Anacomp's FY 1981 revenues should exceed $100 million.

- Anacomp has made 20 major and numerous minor acquisitions since 1970. Acquisition activity in the last two fiscal years has been brisk, with six purchases in 1979, six in 1980, and plans for additional acquisitions in 1981.

- Major fiscal 1979 acquisition activity:

 - Sci-Tek Associates, Inc., based in Boston (MA), was acquired in August 1978 for $128,000 in cash. 1978 revenues were $741,040, with losses of $85,185. Sci-Tek provides facilities management and computer professional services to state and local governments.

 - Escom, Inc., based in Seattle (WA), was acquired in September 1978 for $450,000. 1978 revenues were $4,961,042, with losses of $367,639. Escom provides software, turnkey systems, processing services and professional services in the Pacific Northwest.

 - Computer Services Corporation, based in Detroit (MI), was acquired in October 1978 for $952,322 in cash. 1978 revenues were $3,581,600, with a profit of $80,600. Computer Services Corporation is a major supplier of on-line data processing services to credit unions in the Midwest.

 - Access Data Systems, Inc., based in Phoenix (AZ), was acquired in January 1979 for $450,000 in cash. 1978 revenues were $1,499,954, with profits of $76,605. Access Data Systems, formerly a subsidiary of URS Corporation, provides processing services to credit unions in the Southwest and Rocky Mountain areas.

 - ERCO, Inc., based in Dayton (OH), was acquired in March 1979 for $500,134 in cash. 1978 revenues were $1,550,937, with losses of $119,768. ERCO, formerly owned by Cube, an NCR credit union subsidiary, provides credit union processing in Ohio and the District of Columbia.

 - Wachovia Services, Inc., based in Winston-Salem (NC), sold part of its assets to Anacomp in October 1978 for $3,300,000 in cash. Anacomp now has the right to process certain banking and COM services to Wachovia customers.

- Major fiscal 1980 acquisition activity:

 - Computer Micrographics, Inc., based in Torrance (CA), was acquired in September 1979 for $11,392,000 in cash and stock. 1978 revenues were

©1981 by INPUT. Reproduction Prohibited.

approximately $12 million with a profit of $551,637. Computer Micrographics operates micrographics service centers in major cities throughout the U.S.

- Capital Data Prep, Inc., based in Tallahassee (FL), was acquired in July 1979 for $20,000 in cash. Capital Data provides local data entry services.

- Cogna Systems Corporation, based in Chicago (IL), was acquired in October 1979 for $400,000. 1978 revenues were $8.5 million. Cogna Systems provides software development and professional services to users of large-scale computers.

- Arthur S. Kranzley and Company, Inc., based in Cherry Hill (NJ), was acquired in April 1980 for $900,000 in stock. Arthur Kranzley and Company specializes in electronic funds transfer and transaction processing software systems.

- SynerGraphics, Inc., based in San Francisco (CA), was acquired in May 1980 for $10,965,000 in cash and stock. 1979 revenues were $13.2 million. SynerGraphics, a former Transamerica subsidiary, operates eleven micrographic service centers in major U.S. cities.

- Electronic Data Processing Corporation, based in Detroit (MI), was acquired in December 1979 for an undisclosed amount of cash. 1978 revenues were under $3 million. EDP Corporation specializes in local credit union and mortgage loan company processing.

- Major fiscal 1981 acquisition activity:

 - Computer Management, Inc., based in Cleveland (OH), was acquired in August 1980 for $1.4 million in cash and stock. 1979 revenues were approximately $4 million. CMI provides packaged and custom IBM-based software to manufacturers, government and banks. Computer output microfilm and micrographics equipment and supplies are also available.

 - Eikon Technology, Inc., based in Manchester (NH) sold a majority interest in one of its divisions to Anacomp in September 1980. Anacomp transferred the assets of its Radiographix Division to Eikon in exchange for a 57.1% interest in the new company, Eikon Radiographix, Inc. The new company will specialize in the conversion of medical x-rays to diagnostic quality microfiche for storage and retrieval.

 - Microfilm Communications Systems, Inc., based in Denver (CO), signed a letter of acquisition intent in October 1980. 1978 revenues were approximately $1 million. Microfilm Communications specializes in computer output microfilm to clients in the Denver area.

©1981 by INPUT. Reproduction Prohibited.

- MICRO/LAND Corp. of Cincinnati was acquired in February 1981 for an undisclosed amount of Anacomp stock. MICRO/LAND provides COM services from data centers in Cincinnati, Toledo, Columbus and Detroit and had sales of approximately $2.5 million in FY 1980.

- Certain assets of General Computing Corporation, a New York micrographics company, were also acquired in February 1981.

- In February 1981, Anacomp and the Dun and Bradstreet Corporation terminated discussions for the acquisition of Zytron Corporation by Anacomp. Zytron, one of the nation's largest providers of COM services, will continue to operate as a unit of National CSS, a D&B subsidiary.

- Anacomp currently has 1,800 employees divided as follows:

Micrographics Division	910
Data Services Division	60
Bank Services Division	630
Government Services Division	200
	1,800

KEY PRODUCTS AND SERVICES

- Anacomp is organized into divisions based on major business areas. INPUT estimates its FY 1980 revenues as follows:

Data Services Division	13%	$ 8.7 million
Financial Services Division	42	28.2
Government Services Division	15	10.0
Micrographics Division	30	20.1
	100%	$67.0 million

- The Data Services Division (DSD) provides its products as software, turnkey systems or processing services to commercial clients. DSD is built around products developed by Escom, Inc., which was acquired in 1978. Major products include:

 - Manufacturing Management and Control (MMC), a planning and financial control package for small and medium-sized manufacturers. There are eleven basic modules: engineering, sales order processing, purchase order processing, inventory planning, work in process costing, work order launching, shop floor control, accounts payable, accounts receivable, payroll and general ledger.

 . MMC is available as a licensed software product for $30,000. When packaged with a Prime or Microdata minicomputer, the turnkey system sells for $80,000 to $200,000. Forty systems have been installed.

©1981 by INPUT. Reproduction Prohibited.

- DSD provides smaller manufacturers with the MMC product on a timesharing basis.

- DISTRIBUTE is a financial package for wholesalers and distributors. Modules available include: order tracking, back-order processing, inventory control, accounts payable and receivable, payroll and general ledger.

 - DISTRIBUTE is available as a licensed software product and sells for $10,000 to $20,000. Packaged with Prime or Microdata minicomputers, the system sells for $60,000 to $200,000. Seventy-five systems have been installed.

- DSD also offers software in the areas of construction, forest products, hospital management, medical clinics and property management.

- In February 1981, Anacomp and NCR Corporation signed a multi-million dollar agreement to develop and implement an interactive hospital information system over the next three years for a large midwest hospital.

- The Financial Services Division (FSD) provides software products to large banks and financial institutions and processing services to smaller banks and credit unions. The division has grown primarily through acquisition.

 - The purchase in 1975 of Electronic Data Preparation Corporation (EDPC) provided the main FSD products. EDPC software was written to operate on NCR Century and Criterion systems only.

 - The major product is Customer Integrated/Referenced File (CI/RF), which integrates all client accounts into a single file. There are twelve modules: certificate of deposit, club savings, commercial checking, current accounts, commercial loan, high interest saving, installment loan, mortgage loan, overdraft checking loan, passbook savings and personal checking. A foreign exchange module for international banking is under development.

 - CI/RF is available as a licensed software product or as a processing service from three FSD data centers. There are currently over 75 clients.

 - FSD has an agreement with NCR Corporation where NCR markets CI/RF and other products in addition to its computers. This arrangement has been in effect for over five years.

 - Other acquisitions, particularly Cogna Systems and Computer Management, expanded FSD's offerings to include similar products operating on IBM equipment. Currently under development, in conjunction with four banks, is the Continuous

©1981 by INPUT. Reproduction Prohibited.

Integrated System (CIS), an enhancement providing real-time updating of file information. CIS will be compatible with most large mainframes. Other products available from FSD include demand deposit accounting, customer information management system (CIMS), descriptive combined statement (Money Manager), charge card, installment loan, retail accounts information, time deposit, floor planning, commercial loan and Bankserv.

- With the acquisition of Kranzley and Associates and Computer Management, FSD added products and services in the area of Electronic Funds Transfer (EFT). Three products are available:

 . EFT 8300 provides EFT and Automated Teller Machine capability to large-scale IBM machines.

 . EFT 8500 is a similar system for Interdata minicomputer installations.

 . Customer Oriented Electronic Fund Transfer System (COEFTS) provides on-line remote authorization of credit card and check transactions for ATM and point-of-sale terminals. COEFTS operates on IBM system 360/370 equipment.

 . FSD operates the EFT switching systems for the Rocky Mountain Switch in Denver (CO), the Maryland Switch in Baltimore (MD), and the the Metroteller Switch in Buffalo (NY).

- FSD became active in the credit union processing area with its acquisitions of Computer Accounting, Access Data, Computer Service Corporation, EDP of Detroit and ERCO. FSD serves 200 credit unions with interactive processing service from seven data centers. FSD licenses software to credit unions and markets a turnkey system based on Datapoint minicomputers.

- Through its many micrographic centers, Anacomp offers financial institutions full COM, microfilm and micropublishing services.

• The Government Services Division (GSD) provides facilities management, processing services and micrographics services to state, county and local government.

- GSD currently provides facilities management for the Indiana Department of Revenue and Indiana Department of Motor Vehicles. GSD has software for use by other state government agencies, including Medicare/Medicaid programs, allocation of CETA funds, aid to dependent children and other social service areas.

- Services to county and local government include a voter registration system, property tax appraisal system, county on-line title system

©1981 by INPUT. Reproduction Prohibited.

(COLTS), law enforcement information system (SLEUTH), criminal justice system, utility billing system and fleet management system.

- Micrographic services are available in many areas for government processing.

- The Micrographics Division provides Computer Output Microfilm (COM), microfilming and micropublishing to commercial clients. Growth in the Micrographics Division has been mostly through acquisition. Of the 30 existing COM centers, eight were opened by Anacomp and 22 were added by acquisition. Before consolidation of overlapping centers, the Micrographics Division added eleven locations through the SynerGraphics acquisition, and ten with Computer Micrographics.

 - The acquisition of Eikon Technology established Anacomp as a major supplier of x-ray minification services to hospitals. X-ray minification converts medical and industrial x-rays to surgical quality microfiche. The x-ray microfiche market has grown as the silver in conventional x-rays becomes more expensive.

INDUSTRY MARKETS

ITEM / FISCAL YEAR	1980	1979	1978	1977
Banking & Financial				
. Revenues	$27,501	$14,866	$5,837	$5,826
- Percent of total	41%	39%	27%	36%
Government				
. Revenues	$ 9,390	$10,673	$7,999	$5,664
- Percent of total	14%	28%	37%	35%
Commercial*				
. Revenues	$30,184	$12,579	$7,783	$4,693
- Percent of total	45%	33%	36%	29%

* Includes manufacturing, utilities, distribution, medical, insurance and education.

GEOGRAPHIC MARKETS

- Anacomp's 1980 revenues were distributed as follows:

©1981 by INPUT. Reproduction Prohibited.

East	35%
Midwest	34
Northwest	9
Southwest	17
Foreign	5
	100%

- Foreign revenues were from Australia, Europe, the Middle East and South America.

COMPUTER HARDWARE

- The Government Services Division operates facilities management contracts or data centers in Indianapolis (IN), Bradenton (FL) and Ft. Pierce (FL). Equipment in these centers consists of:

 - NCR Century Series systems.
 - NCR Criterion systems.
 - Prime minicomputers.

- The Data Services Division uses computers operated by the Financial Services Division for credit union processing.

- The Financial Services Division operates bank data processing centers in Greenfield (IN), San Francisco (CA) and Winston-Salem (NC). Credit union processing is performed in Colorado Springs (CO), Dayton (OH), Flint (MI), Indianapolis (IN), Phoenix (AZ), Sarasota (FL) and Southfield (MI). NCR Criterion systems are used in the bank data centers. Credit union processing is performed on medium-sized Burroughs systems.

- The Micrographics Division operates COM centers in California (9), Connecticut (2), Florida, Georgia (3), Illinois, Indiana, Massachusetts, Minnesota, New Hampshire (2), New Jersey, New York, North Carolina (2), Ohio (4), Pennsylvania, Texas (4) and Washington State. Currently, there is a total 35 centers.

©1981 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

ANACOMP, INC.
6161 Hillside Avenue
Indianapolis, IN 46220
(317) 257-6555

Ronald D. Palamara, President
and Chairman of the Board
Public Corporation, OTC (ANCM)
Total employees: 800
Total sales, fiscal year end
6/30/78: $21,618,900

THE COMPANY

- Anacomp is a computer services company specializing in software development, on-line services, facilities management, and micrographics services to approximately 1,000 clients. The annual compound revenue growth since June 1969 is 76.49%. Between 1975 and 1976 it grew 44% from $8.9 million to $12.8 million. It grew to $16.1 million in 1977, a 26% increase, and in 1978 sales increased 34% to $21.6 million.

- Net income grew to $1.6 million in 1978, up 33% from the $1.2 million level in 1977.

- Anacomp was organized in Indiana in 1968 by a group of professors and consultants from Purdue University. During the company's first two years of operation, revenues were derived from internal development and the creation of new services. Its major business was creating and selling programmed instruction tapes and cassettes. On-line data processing services were also offered. From 1970 to 1975, growth came from the acquisition of 9 companies. Since July 1975, four additional acquisitions have been completed. The effect of these acquisitions is expected to be positive.

- Anacomp's aggressive acquisition policy has been an asset during the recent period of computer services industry consolidation.

- During 1978, Anacomp made several major acquisitions which should provide an excellent base for further expansion.

 - The acquisition of Sci-Tek Associates of Boston, Massachusetts, has strengthened Anacomp's advancement in the state and local government software and facility management markets. This acquisition has placed Anacomp in an excellent position for securing a larger segment of the governmental computer services market.
 - Escom, Inc., a Seattle, Washington based corporation, is one of the largest providers of software for minicomputer systems in the United States and Canada. This acquisition has allowed Anacomp to become firmly established in the minicomputer field.

© 1979 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

- Anacomp's acquisition of Computer Services Corporation, located in Detroit, Michigan, has created one of the strongest forces in credit union processing in the Midwest. CSC is a general data processing company which specializes in providing on-line processing to credit unions.
- Most recent has been Anacomp's acquisition of the bank services division and certain other assets of Wachovia Services, Inc. in Winston-Salem, North Carolina. Through this acquisition, Anacomp has significantly increased its operations in the South and has become one of the largest providers of computer services for banks in that area of the United States.

KEY PRODUCTS AND SERVICES

- Anacomp has four divisions which provide services and some products principally to banking and government clients located throughout the U.S., Europe, Asia, and Australia. The major divisions are: Software Services, Facilities Management, Data Services, and Micrographics. It is estimated that over 300 financial institutions and government agencies use Anacomp software services.

- The Software Services Division generated 18% of company revenues in fiscal year 1978. It has developed large-scale proprietary applications software for banking and government clients for use primarily on NCR equipment. The two principal software packages are CI/RF (Customer Integrated/Reference File) and IRFS (Integrated Real-Time Financial Systems).

- The Facilities Management Division generated 22% of total revenues in fiscal 1978. It provides on-site facilities management (FM) services to numerous states and local government agencies and financial institutions. Several of the FM contracts use the software developed by the Software Services Division.

- The Data Services Division generated approximately 18% of revenues in 1978. It provides on-line, interactive processing services to 152 users, primarily banks, savings and loans, and credit unions. City and county municipalities are also clients. All services are offered through Anacomp-run data centers, or shared data processing facilities.

- The Micrographics Division, formerly the COM division, generated 42% of total revenues in 1978 and has 700 clients. It provides computer output microfilm services to clients with in-house data processing facilities and personnel. Micrographics also offers business graphics, micropublishing and republishing, and markets micrographics film and COM duplicating equipment. Through a marketing and management agreement with Kalvar, Anacomp also exclusively markets vesicular film manufactured by Kalvar.

APPLICATIONS Much of the software developed by Anacomp is for industry-specialized application.

© 1979 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

INDUSTRY MARKETS The financial industry and government generated over 64% of Anacomp revenues in 1978:

Government	37%
Banking and Finance	27
Distribution	18
Manufacturing	10
Utilities	5
Medical/Hospital	1
Insurance	1
Education	1
	100%

GEOGRAPHIC MARKETS

- Anacomp currently has offices in Indianapolis and Evansville, Indiana; Cincinnati, Cleveland, Columbus, and Dayton, Ohio; Sarasota, Bradenton, and Fort Pierce, Florida; San Francisco, California; Seattle and Spokane, Washington; New Orleans, Louisiana; Anchorage, Alaska; Portland, Oregon; Detroit, Michigan; Fredericksburg and Virginia Beach, Virginia; Winston-Salem and Salisbury, North Carolina; Suitland, Maryland. Foreign offices are located in Canada, Philippines, England, Belgium, Australia, and Kuwait.

- Clients are principally located in the North Central U.S., as shown below:

East	31%
Midwest	37%
West	12%
Southwest	14%
International	6%

COMPUTER SOFTWARE AND HARDWARE

- Anacomp uses a variety of computer equipment in providing its services. NCR mainframes are used for software design and implementation and facilities management. On-line processing is principally on Burroughs equipment. Anacomp also provides software for various minicomputers.

© 1979 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

Sarah Hayman
Client

COMPANY HIGHLIGHT

ANACOMP INC.
6161 Hillside Avenue
Indianapolis, IN 46220
(317) 257-6555

Ronald D. Palamara, President
and Chairman of the Board
Public corporation, OTC (ANCM)
Total employees: 400
Total sales, fiscal year end
6/30/77: $16,183,279

THE COMPANY

- Anacomp is a computer services company specializing in software development, online services, facilities management, and micrographics services to approximately 600 clients. Between 1975 and 1976 it grew 44%, from $8.9 million to $12.8 million. It grew to $16.1 million in 1977, a 26% increase.

- Net earnings during the same two-year period doubled from $516,000 to 1,192,238. Earnings per share in fiscal year 1977 were $1.09 with 1,091,000 share outstanding.

- It was organized in Indiana in 1968 by a group of professors and consultants from Purdue University. Through March of 1970 revenues were derived from internal development and the creation of new services. Its major business was creating and selling programmed instruction tapes and cassettes. Online data processing services were also offered. From 1970 to 1975, growth came from acquisition.

- Anacomp's agressive acquisition policy has been an asset during the recent period of computer services industry consolidation.

 - It recently announced an agreement in principle to acquire all outstanding stock of Computer Management, Inc. (CMI), Cleveland, Ohio. CMI provides software development for IBM mainframes as well as computer output microfilm services.

 - The 1975 acquisition of Electronic Data Preparation Corporation in Florida, a software company specializing in development and implementation of banking and thrift institution software (CI/RF and IRFS) has provided Anacomp with the expertise to make a further penetration into banking and finance markets. Thus, Anacomp is well positioned to take advantage of the advent of electronic funds transfer systems for banks, savings and loans, and credit unions, using advance work done on distributed data processing systems and point of sale processing.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

- Acquisition discussions with both Midwest Advanced Computer Services in 1976 and Computer Usage Corporation in 1975 have been discontinued.

KEY PRODUCTS AND SERVICES

- Anacomp has four divisions which provide services and some products to principally banking and government clients located throughout the U.S. and in Europe and the Philippines. The Divisions are: Software Services, Facilities Management, Data Services, and Micrographics.

- The Software Services Division, generated 26% of company revenues in fiscal year 1977. It has developed large-scale proprietary applications software and for 12 banks and savings and loan clients with NCR equipment. In addition, it offers consulting services to government clients. The two principal software packages are CI/RF (Customer Integrated/Reference File) and IRFS (Integrated Real-Time Financial Systems) for savings and loans.

- The Facilities Management Division generated 25% of total revenues in fiscal year 1977. It provides on-site facilities management (FM) services to 13 states and local government agencies and financial institutions. Several of the FM contracts utilize the software developed by the Software Services Division.

- The Data Services Division generated approximately 17% of revenues in 1977. It provides online, interactive processing services to 152 users, primarily banks, savings and loans, and credit unions. City and county municipalities are also clients. All services are offered through Anacomp-run Data Centers, or shared data processing facilities. They are essentially cooperatives for data processing.

- The Micrographics Division, formerly the COM division, generated 32% of total revenues in 1977 and has 425 clients. It provides computer output microfilm services to clients with in-house data processing facilities and personnel. Micrographics also offers business graphics, micropublishing and republishing, and markets micrographics film and COM duplicating equipment.

APPLICATIONS Much of the software developed by Anacomp is for industry-specialized application.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

COMPANY HIGHLIGHT/ANACOMP INC.

INDUSTRY MARKETS The financial industry and government generated over 70% of Anacomp revenues in 1976:

Banking and Finance	36%
Government	35
Manufacturing	11
Utilities	5
Distribution	4
Medical/Hospital	4
Insurance	3
Education	2
	100%

GEOGRAPHIC MARKETS

- Anacomp has offices in Indianapolis, IN; Cleveland, Cincinnati, Columbus, and Dayton, OH; Sarasota, Fort Pierce, and Bradenton, Florida; South San Francisco and Stockton, CA; Rizal, Phillippines; London, England; and Brussels, Belgium.

- Its clients are principally located in the North Central U.S., as shown below:

New England	0 %
Northeast	9
Southeast	27.5
North Central	49.6
Midwest	1
Mountain	0
Pacific Coast	6.3
International	6.6%

COMPUTER SOFTWARE AND HARDWARE

- Anacomp utilizes a variety of computer equipment in providing its services. NCR mainframes are used for software design and implementation and facilities management. On-line processing is principally on Burroughs equipment. Various minicomputers are currently being evaluated for use as part of Anacomp services.

- Anacomp uses the following equipment to provide its services:

NCR Century 201	2	IBM 548	1	Betacom 700L	5
NCR Century 200	2	Burroughs B27711	1	Pertec 3700	5
NCR Century 300	1	Datagraphix 4440	1		
IBM 360/30	1	Entrex 480 4366	5		

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

Sarah Hayman

DETAILED COMPANY PROFILE

ANACOMP, INC.
6161 Hillside Avenue
Indianapolis, Indiana 46220
(317) 257-6555

Ronald D. Palamara, President
and Chairman of the Board
Public Corporation, OTC (ANCM)
Total employees: 400

Total Company and Computer Services Sales
Fiscal year end 6/76: $12.8 million
Fiscal year end 6/77: $15.0 million (estimated)

INTRODUCTION AND SUMMARY

- Anacomp is a computer services company specializing in software development, on-line services, facilities management, and micrographics services. Between 1975 and 1976 it grew 44%, from $8.9 million to $12.8 million. It is expected to grow to $15 million in 1977, a 17% increase. Net earnings during the same two-year period are expected to double, going from $516,000 to nearly $1.2 million. Earnings per share in fiscal 1976 were $.77 with 925,000 shares outstanding.

- Anacomp has a total of 400 employees, most of whom (68%) work in operations, which includes a systems and programming staff of 100; 45 are in sales and service; 20 are in research and development; and 60 in administration.

- Facilities management contracts will account for 24% of fiscal 1977 revenues, software services 30%, data services 17%, and computer output microfilm services contribute 29%. (These are from unaudited financials.)

- The three-year contract with the State of Indiana for $5.6 million for processing services awarded in 1975 constitutes the bulk of the government revenues for 1976.

- The 1975 acquisition of Electronic Data Preparation Corporation, Florida, a software company specializing in development and implementation of banking and thrift institution software, (CI/RF and IRFS) has provided Anacomp with the expertise to make a further penetration into the banking and finance market. Thus, Anacomp is well positioned to take advantage of the advent of electronic funds transfer systems for banks, savings and loans, and credit unions, using advance work done on distributed data processing systems and point of sale processing.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

- Much of the software developed by Anacomp is for special industry oriented applications.

- Anacomp's aggressive acquisition policy is an asset during the current period of computer services industry consolidation.

- The major challenges facing Anacomp management over the next few years are to: continue the momentum created by the acquisition strategy, and mold the acquired companies into an integrated profitable entity.

- Management's goal of reaching $50 million annual revenues by 1980 will be achieved through selective acquisitions and internal expansion.

- In fiscal 1976, three major contracts extending more than one year generated approximately 28% of Anacomp revenues.

 - Facilities Management contract for State of Indiana: 14%.
 - Software system licensing and implementation contract: 10%.
 - Development and implementation of software system through subcontract arrangement with NCR: 4%.

- Anacomp's major competitors include:

 - Automatic Data Processing, Inc.; Computer Sciences Corporation; Electronic Data Systems Corporation; Synergraphics; United States DataCorp; Zytron; Xidex; and Optimum Systems, Inc.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

HISTORY AND BACKGROUND

Anacomp was organized in Indiana in 1968 by a group of professors and consultants from Purdue University. Key founders were: the head of Purdue's Computer Science Department; the Dean of its Continuing Education Department; an Administrator of its Engineering School; and a Deputy Attorney General. In December 1968, Anacomp made its first public offering of 195,000 shares at $4.67 per share.

From December 1968 through March 1970, revenues were derived from internal development and the creation of new services. Prior to 1973, the company rendered services in the educational area and the principal computer service was on-line data processing.

Beginning in March 1970 and until 1975, the company acquired new business lines. Exhibit I lists these acquisitions and their product lines. Since 1975, all growth has been internal. The company intends to continue to grow through product and service enhancement and selected acquisitions. Internal growth contributed approximately $2.1 million of increased revenues and approximately $0.5 million increased profit in fiscal 1976, and approximately $1.3 million additional revenues in fiscal 1975.

Anacomp has maintained a high profit status while expanding via acquisitions. Exhibit II shows five-year revenues and income by division. More detailed financial information is available on pages 26 and 27.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

EXHIBIT I

COMPANY	Business	Date of Acquisition	Estimated Revenue at time of Acquisition	Division or Final Disposition
Computer Techniques, Inc.	On-line Services	March, 1970	$ 600,000	Data Center Division
Micromation, Inc.	COM	Nov., 1970	50,000	Micrographics Division
The Data Processing Center, Inc.	EDP	Jan., 1971	300,000	Sold
American Information Systems, Inc.	COM	June, 1971	250,000	Micrographics Division
Micrographix Data Services, Inc.	COM	August, 1973	700,000	Micrographics Division
Electronic Data Preparation Corporation (Indiana)	FM	Oct., 1973	3,000,000	Facility Management Di
Computer Micro Services, Inc.	COM	Feb., 1974	600,000	Micrographics Division
Electronic Data Preparation Corporation (Florida)	Software	March, 1975	4,000,000	Software Services
Computer Accounting, Inc.	On-line Services	July, 1975	500,000	Data Centers Division

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

EXHIBIT II

The approximate revenue and percentages of total revenue of the Company contributed by services for the five years ended June 30, 1976, were as follows:

Revenues (in thousands) and Percentages
Fiscal Year ended June 30,

	1972	%	1973	%	1974	%	1975	%	1976	%	Projected 1977	%
Computer Software Services*	$1,028	69	$1,231	75	$4,322	72	$6,124	69	$10,190	79	$10,200	68
Micrographics Services	338	23	413	25	1,709	28	2,798	31	2,661	21	4,800	32
Other**	122	8										
TOTAL	$1,488	100	$1,644	100	$6,031	100	$8,922	100	$12,851	100	$15,000	100

For such services, the amounts and percentages of income (loss) of the Company before income taxes, minority interest and extraordinary items for the five years ended June 30, 1976, were as follows:

Income (Loss) Before Income Taxes,
Minority Interest and Extraordinary Items
(in thousands) Fiscal Year ended June 30,

	1972	%	1973	%	1974	%	1975	%	1976	%	Projected 1977	%
Computer Software Services*	$ (212)	101	$ (16)	(59)	$ 437	83	$ 802	77	$ 1,297	82	$ 1,518	69
Migrographics Services	(24)	(11)	(2)	(8)	123	23	242	23	293	18	682	31
Other**	26	12	(9)	(33)	(33)	(6)						
TOTAL	$ (210)	100	$ (27)	100	$ 527	100	$1,044	100	$ 1,590	100	$ 2,200	100

*includes Software Services, Data Services, and Facilities Management Divisions.

**includes Educational Division.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

KEY PRODUCTS AND SERVICES

Anacomp has four divisions which provide services and some products to principally banking and government clients located throughout the United States and in Europe and the Philippines. These divisions are:

- Software Services Division, offering large-scale software systems for financial and government applications, as well as system development, modification, and implementation services.
- Facilities Management Division, providing hardware and software management services to banks and state and local government agencies.
- Data Services Division, providing on-line data processing services for financial and government applications.
- Micrographics Division (formerly the COM division), having five computer output microfilm service bureaus, and offering microform duplications, business graphics, micropublishing, and microrepublishing services, as well as marketing of various COM-related equipment and film.

There is a large degree of interaction among Anacomp's divisions. Software packages, typically developed in Software Services, are utilized by both Facilities Management and Data Services. Some Facilities Management contracts which have migrated from a single agency's center to multiple agency shared Data Centers are managed by Data Services.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

SOFTWARE SERVICES

The Software Services Division, headed by Jim Mathis, Vice President, generated 30% of Anacomp revenues in fiscal 1977. The Division has developed large-scale proprietary applications software systems for banks and savings and loan clients, with NCR equipment. Anacomp modifies and implements the software to meet specific client requirements.

The two principal software packages are Anacomp's CI/RF (Customer Integrated/Reference File) and IRFS (Integrated Real-Time Financial Systems). Bank and retail store credit card processing software is also available. In addition, this division performs systems development and implementation and consulting for domestic and foreign governments.

- o CI/RF. This system was developed for commercial retail banks.
 - Individual applications include: Demand Deposit, Cash Reserve, Installment Loans, Regular Savings, Time Deposit Open Accounts, Club, Mortgage Loan, Certificate of Deposit, Individual Retirement Accounts, Commercial Loan, and Master Charge.
 - CI/RF processes input from daily systems; in addition to direct on-line data capture of non-dollar data, to update the customer data base and account activity. Information is also extracted from the Master Charge and Commercial Loan automated systems. All the customer information is combined into a single file with a single account number, with name and address cross-referencing.
 - Input is on-line and off-line; MICR and non-MICR data entry.
 - The system permits on-line inquiry of all files and on-line update of all but the Commercial Loan and Master Charge files.
 - On-line inquiry into CI/RF is through NCR 279 Teller Terminals, NCR 796 CRT Display Terminals, and NCR 260 Thermal Printers. The inquiry system allows the teller to place holds on the account and verify account balances.
 - The system generates a single, combined statement of all activity for each account. Reports are available as computer print-outs or on microfilm.
 - The inquiry, remote input/output and multi-bank processing features of this system make it suitable to branch, correspondent, or affiliate bank environments.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

- IRFS. Integrated Real-Time Financial System. Designed for savings and loans, this system also provides an integrated real-time system based on a comprehensive customer information file. Modular in structure, IRFS has almost unlimited growth capability and comprehensive update procedures.

- Credit Card System. Designed for banks and retailers, this system provides extensive merchant and various cardholder services. It offers on-line inquiry with computer response verification for accuracy. On-line capabilities include merchant and cardholder inquiry, cardholder authorization, cardholder prior statement information, current financial account balance, and other information necessary for efficient credit card management.

- Typically, two years is required to modify and install these systems to client specifications. Enhancement, modification, and implementation are performed by Anacomp on a contract basis. In addition, users pay Anacomp license fees for the use of the software. Fees are based on the number of accounts processed and are payable for the life of the system.

The Software Services Division will provide contract programming or systems development and design services only if the resulting software builds on the company's current expertise or if the software permits a penetration into new markets of interest to Anacomp. In both cases, the research and development is jointly funded by the client and Anacomp, although Anacomp retains rights to any software developed. If Anacomp then licenses this software to other users, the original client receives a royalty.

The design and implementation of these software systems are generally undertaken as part of a major new computer equipment installation. Anacomp is currently modifying and implementing its CI/RF package for Manufacturers Hanover Trust Company in New York. CI/RF is also installed at Winters National Bank of Dayton, Ohio; Sumitomo Bank of California; and First National Bank of Omaha, Nebraska.

In addition to the licensing of software systems and system design, Anacomp's Software Services Division provides consulting services to government clients. Some recent consulting projects include:

- Preparation of draft RFP (Request for Proposals) and Bid Evaluation Guide for State of Indiana 1978 Medicaid Fiscal Agent Program.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

- Data processing plan for Montgomery County, Ohio.
- County Information and Decision System, Saint Lucie County, Florida.
- System Analysis for Social Security System for the Republic of the Philippines. This system is based on the one developed for the Department of Revenue for the State of Indiana.
- Two year Data Processing plan and Integrated Law Enforcement Information System for Ministry of Interior, United Arab Emirates.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

FACILITY MANAGEMENT DIVISION

The Facility Management Division, headed by Carl Marr, Vice President, generated 24% of total Anacomp revenues in fiscal 1977. The Division currently provides on-site facilities management (FM) services to various state and local government agencies and financial institutions. A facilities management contract is defined by Anacomp as providing the following services:

- Acquisition, maintenance, and operation of computer mainframes, mainframe-related equipment, and software. Anacomp specializes in NCR equipment. Users are responsible for all terminal hardware.
- Employment and training of all data processing personnel.
- Control of data preparation and input.
- Performance of systems analysis, programming, and implementation of new applications when required.

The FM Division is now operating two FM's for the State of Indiana. For the Indiana Department of Revenue, Anacomp personnel enters and updates business and individual state tax return files in the central computer. Anacomp is currently maintaining twenty-two applications for the Department of Revenue. Department personnel access the information via on-line terminals.

The second FM contract, with the Bureau of Motor Vehicles, began when Anacomp converted 13,000,000 annual motor vehicle registrations, state police records, and government administrative documents from a paper-based to an automated data processing system. The FM Division then assumed management and control of the facility as outlined above.

The Republic of the Philippines contract with Anacomp's Software Services Division to develop a Social Security System (similar to the Department of Revenue system) was implemented as an FM contract. Anacomp also has FM contracts with financial institutions utilizing CI/RF, such as Sumitomo Bank of California. These FM contracts are administered by the Data Services Division.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

DATA SERVICES DIVISION

The Data Services Division, under Vice President Ron Vance, generated approximately 17% of Anacomp revenues in fiscal 1977. This division provides on-line, interactive processing services to 152 users, primarily banks, savings and loans, and credit unions, in addition to city/county municipalities.

All services are provided through a series of Anacomp-run Data Centers or shared data processing facilities. The Data Center concept is based on the idea of various similar entities sharing the high fixed costs of data processing in an FM arrangement. It is essentially a cooperative for multiple government agencies or financial institutions.

Anacomp currently operates Data Centers for banks, savings and loans, credit unions, and city and county agencies throughout the country.

The San Francisco Data Center provides Sumitomo Bank of California, and other local banks, with automated banking services, an on-line network linking all its branches, remote data capture, and on-line inquiry via teller terminals. Anacomp supplies custom software for specific applications as well as operating the computer facility and training bank personnel to use the terminal equipment efficiently.

At another Data Center, Anacomp processes twenty-six credit unions and two banks dispersed over a network covering five states. Over 250 on-site terminals are connected to the center via telephone lines, enabling the credit union or bank and all its branches to maintain current account and balance information. For several of these institutions, Anacomp supports remote automated teller machines (ATM's) at various locations, while others are evaluating the potential of ATM equipment.

Because of this experience with cash machines and point-of-sale networks, and its network of on-line systems, Anacomp is well positioned to offer services to new participants in electronic funds transfer.

City and county agencies utilize Data Centers with the same principle as the financial cooperatives. Anacomp provides on-line, interactive services to city and county officials for such applications as property tax appraisal, tax collection, voter registration, and law enforcement, among others.

Some of the individual software modules available are:

- Criminal Justice System which includes law enforcement, prosecutor, misdemeanor and juvenile court modules. The criminal Justice System is a modular interactive court system which provides for a comprehensive judicial system.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

- Document Recording and Automated Indexing Module creates and maintains an on-line data base for all legal documents filed with a county clerk.

- Bureau of Support is an on-line system which assists in the collection and distribution of court ordered child support payments.

- On-Line Title System creates and maintains a data base on motor vehicle title records.

- Voters Registration System creates permanent files, polling lists and a juror's list.

- Property Tax Appraisal System, which is the central module for county tax accounting, controls the following:

 - Property Tax Accounting System and the Tax Collection and Distribution System.
 - County Tax Accounting System maintains a data base on all county taxes.
 - Tax Collection and Distribution System provides automatic collection, distribution and accounting for county taxes.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

MICROGRAPHICS DIVISION

Under Vice President John Flanigan, this Division generated 29% of Anacomp revenues in fiscal 1977. With 425 clients, Anacomp claims to be one of the largest suppliers of COM services. Formerly known as the Computer Output Microfilm (COM) Division, the Micrographics Division provides COM services to clients with in-house data processing facilities and personnel. The Division also provides business graphics, micropublishing and republishing, and markets micrographics film and hardware.

- COM services consist of converting data from customer supplied magnetic computer tape directly to microform (microfilm or microfiche) copies. Four-by-six inch sheets of microfiche or 100 foot rolls of microfilm are printed at speeds of up to 20,000 lines per minute.

- Business Graphics consolidates a large quantity of detailed information from original source documents to charts and graphs on microfiche. This permits rapid visual interpretation of complicated information.

- Micropublishing consists of the mass reproduction of large bodies of information from computer tape to microfiche. The service includes editing, indexing, duplicating, and distributing final microform copies. Typical candidates for micropublishing are computer generated directories and catalogues.

- Microrepublishing is similar to micropublishing, but the source data is hard copy. Thus, the data on paper is first converted to microfilm or microfiche and then mass reproduced. Candidates for this service include non-computer generated documents such as auto parts catalogues.

- Micrographics Division also sells COM reader and recorder equipment to its clients and markets Kalvar Corporation film and COM duplicating equipment. Kalvar film is also used by the Anacomp Micrographics Division.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

NEW VENTURES

In January, 1977, Anacomp entered into a marketing and management arrangement with Kalvar Corporation of New Orleans, Louisiana. Anacomp's Micrographic Division established a new marketing division in mid-1977, to market Kalvar vesicular film and COM duplicating equipment. The division is expected to realize nearly $2 million in sales this year.

Vesicular film is a dry, silverless processed photographic film used to produce duplicates for the COM and micropublishing industry, as well as for applications in black and white motion pictures, graphic arts, and aerial film duplication. Kalvar originated the vesicular heat process.

There are approximately 2,000 COM recorders in use today recording information from the computer onto microform copies. It is estimated that by the year 1980, this number will increase to 5,000. This rapid increase in recorders will necessitate a corresponding increase in the production of film for these recorders. Through this marketing arrangement with Kalvar, Anacomp intends to capture a share of that market.

Anacomp is also considering offering mini-computers to credit unions and savings and loans. The company is in the process of evaluating mini-computer hardware and OEM arrangements for this purpose.

In addition to these internal growth areas, Anacomp is continuing to search for acquisition possibilities. Acquisition discussions with both Midwest Advanced Computer Services in 1976 and Computer Usage Corporation in 1975, have been discontinued.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

MARKETING

Anacomp evaluates the market penetration of its services by geographic region, industries served, and market maturity. It defines a mature market as four or more years old; a developing market as one to four years old; and potential market as less than one year. Exhibit III is a three-dimensional representation of Anacomp's market penetration.

Its Services are marketed in a variety of methods.

- Software Services, directed primarily to large financial institutions and government agencies with large NCR installations, have been marketed jointly by NCR and Anacomp. Although Anacomp expects to continue this joint approach, it is presently expanding its own marketing efforts in the United States. This will be directed to offering potential users large turnkey systems based on hardware and software owned by Anacomp.

- Data Services are marketed directly to selected credit unions, savings and loans, and banks selected by size. Some direct mail campaigns are made to these potential users.

- Facilities Management contracts usually occur in conjunction with or as add-ons to Anacomp software package sales. These typically utilize NCR equipment.

- Micrographics is marketed through a company selling force calling on companies with large data processing installations.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

DETAILED COMPANY PROFILE/ANACOMP, INC.

EXHIBIT III

GRAPHIC ANALYSIS OF
ANACOMP'S MARKET PENETRATION

MARKET PENETRATION
LEGEND

- MATURE MARKETS
- DEVELOPING MARKETS
- UNDEVELOPED POTENTIAL

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited.

INDUSTRIES SERVED

The financial industry and government generated more than 70% of Anacomp 1976 revenues, primarily for computer services. The remaining clients, principally Micrographics users, are from many industries, as shown below:

Banking/Finance	36
Government	35
Manufacturing	11
Utilities	5
Distribution (Retail & Wholesale)	4
Medical/Hospital	4
Insurance	3
Education	2
TOTAL	100

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

GEOGRAPHIC MARKETS

While primarily located in the North Central United States, Anacomp clients are distributed in many regions of the United States and overseas, as shown in Exhibit IV. The company's offices are listed below:

DOMESTIC FACILITIES AND LOCATIONS

6161 Hillside Avenue
Indianapolis, Indiana 46220

8004 Castleway Drive
Indianapolis, Indiana 46250

40 North East Street
Indianapolis, Indiana 46204

4th and Race Tower, Suite 432
Cincinnati, Ohio 45202

601 Rockwell Avenue
Cleveland, Ohio 44114

Hartman Building
79 East State Street, Suite 306
Columbus, Ohio 43215

Centre City Offices, Suite 550
15 East Fourth Street
Dayton, Ohio 45402

1390 Main Street
Sarasota, Florida 33577

704 North 39th Street
Fort Pierce, Florida 33450

5315 14th Street West
Bradenton, Florida 33505

455 Forbes Boulevard
South San Francisco, California 94080

1340 North Eldorado
Stockton, California 95202

219 North Senate Avenue
Indianapolis, Indiana 46225

107 State Office Building
100 North Senate Avenue
Indianapolis, Indiana 46204

325 State Office Building
100 North Senate Avenue
Indianapolis, Indiana 46204

INTERNATIONAL FACILITIES AND LOCATIONS

P. O. Box 2332 MCC
Makati, Rizal 3117
Philippines

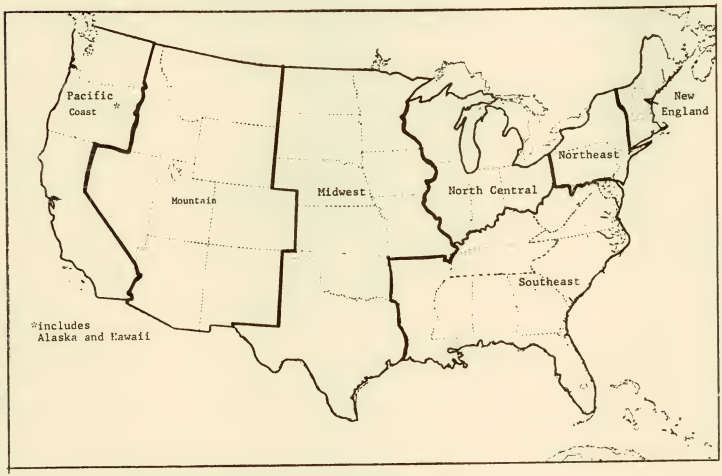
18 Lambolle Road
London NW3 England

Rue de Loxum
5-1000
Drux, Brussels, Belgium

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

EXHIBIT IV

COMPUTER SERVICE SALES (INCLUDING MICROGRAPHICS)
BY GEOGRAPHIC REGION



	1977
New England	---
Northeast	9.0%
Southeast	27.5%
North Central	49.6%
Midwest	1.0%
Mountain	---
Pacific Coast	6.3%
International	6.6%
	100.0%

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

COMPUTER HARDWARE

Anacomp utilizes a variety of computer equipment with NCR mainframes dominating the field for software design and implementation and facility management. Much of the on-line processing for credit unions is done on Burroughs equipment. Mini-computer hardware is being evaluated currently.

Quantity	Equipment
2	NCR Century 201
2	NCR Century 200
1	NCR Century 300
1	Datagraphix 4440
1	IBM 360/30
1	Burroughs B2771l Computer System
1	IBM 548
5	Entrex 480

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

EMPLOYEES

Number of employees engaged in Computer Services and COM Services: approximately 400 (as of August 31, 1976).

	Computer Services	COM	Total
1969	17	-	17
1970	26*	-	26
1971	82*	6	88
1972	46	12	58
1973	57	15	72
1974	163	76	239
1975	312	75	387
1976	333	67	400
1977	323	77	400

*includes Education Division.

EMPLOYEE DISTRIBUTION (approximately)

EMPLOYEE FUNCTION	NUMBER OF PERSONNEL	PERCENT OF TOTAL
Management	30	8.0 %
Sales & Service	45	11.0 %
Systems and Programming	100	25.0 %
Operation	113	28.0 %
Data Entry	82	20.0 %
Clerical	30	8.0 %
	400	100.0 %

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

KEY EXECUTIVES AND DIRECTORS WITH BACKGROUND INFORMATION*

Ronald D. Palamara, President and Chairman of the Board - age 38**

Dr. Palamara received his B.M.E. degree in Mechanical Engineering from General Motors Institute, and his M.S. and Ph.D. degrees in Engineering Mechanics from Wayne State University. He was an Associate Professor at Purdue for four years and was responsible for all graduate school operations at the Indianapolis campus. He has served as a consultant for many branches of government and industry including the Theoretical Research Division of Naval Avionics and Manned Spacecraft Center. During his nine years in industry with General Motors Corporation, he was on the advanced planning staff of its Defense Systems Division and head of Operations Research. Dr. Palamara has been the author of many technical papers in the computer simulation and analysis areas.

Stanley E. Hirschfeld, Vice President-Finance/Secretary - age 43**

After receiving a Bachelor of Science in Business Administration from Ohio State University in 1957, Mr. Hirschfeld worked in public accounting for Johnson, Atwater and Company, followed by experience as secretary and treasurer for American Fabricated Products Company. He came to Anacomp in 1970, becoming a Certified Public Accountant in 1972.

John J. Flanigan, Vice President, Micrographics - age 37

Mr. Flanigan came to Anacomp in 1971, after working as a systems engineer for IBM, and as president of American Information Systems. His academic record consists of completing a physics degree in 1962 from Xavier University, and obtaining a Masters in Business Administration from the University of Dayton in 1964. He is presently a member of the National Micrographics Association.

J. Fred Williams, Vice President, Marketing - age 35

Mr. Williams started out his working experience as a sales representative for Roche Labs, IBM, and American Information Systems, followed by a position as general manager for Consumer Communications Services. His educational background includes a Bachelor of Science in biology/chemistry from Youngstown State University.

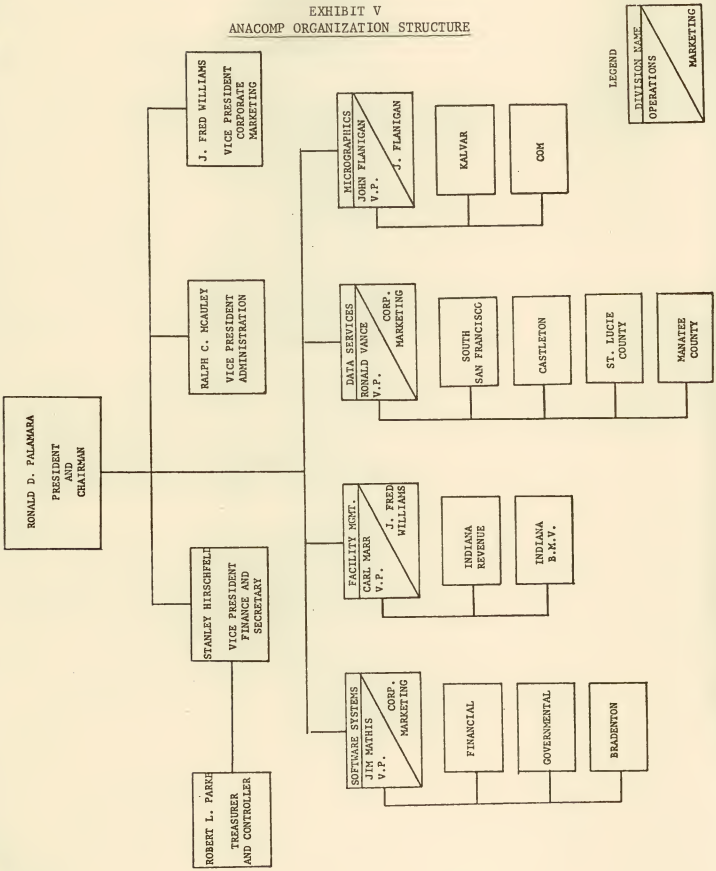
James O. Mathis, Vice President, Software Services - age 52

Mr. Mathis received his Bachelor of Science in Business, with an accounting major, in 1948, and his Masters in Business Administration from Indiana University in 1953. As a senior systems analyst for the State of Indiana, he assisted in designing the first system to utilize computerized data processing equipment in Indiana. He has

*See Exhibit VI for detailed organizational chart.
**Members of the Board of Directors.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

EXHIBIT V
ANACOMP ORGANIZATION STRUCTURE



© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited.

held several posts in Indiana government, including Deputy Commissioner of Indiana Department of Revenue; Deputy State Examiner, State Board of Accounts; Commissioner of Revenue; Deputy Commissioner, Indiana Higher Education Commission. While participating in Governor Whitcomb's Economy Program, he helped fully automate the Department of Revenue by use of on-line interactive terminals and new computerized tax systems. Mr. Mathis is also a Certified Public Accountant.

Carl M. Marr, Vice President, Facility Management - age 39

Mr. Marr, after attending Palm Beach Junior College and numerous RCA and NCR Professional Training Classes, served as Regional Systems Manager for RCA. He was involved in designing and programming the first computerized type-setting developed in 1963 for a Florida newspaper chain, and in installing RCA's first emulation system for the Puerto Rico Water Resources authority. Mr. Marr has held his present position since 1972.

Ralph C. McAuley, Vice President, Administration - age 43

Having served with Anacomp as Vice President of Computer Sciences from 1971 until 1975, Mr. McAuley rejoined Anacomp in 1976 as Vice President of Administration. He has been in the data processing field for over 20 years. Before coming to Anacomp in 1971, he served as President and Chairman of the Board of Capital City Service Bureau, located in Indianapolis. During his absence in 1975, he served as Senior Vice President of Tolley International Corporation.

Ronald E. Vance, Vice President, Data Services - age 39

Ronald E. Vance, Vice President of Data Services, joined Anacomp in July of 1977 with nearly twenty years of experience in the EDP and Computer Services field, including several years involvement in the COM industry. For fifteen years prior to joining Anacomp, Mr. Vance was with NCR, heading their United States Data Processing Center Division. He also managed several field Data Processing Centers, as well as managing NCR's Western Division DPC offices prior to becoming Assistant Vice President in 1974. He has taken several training courses at NCR, Sperry-Univac, and the University of Pennsylvania, and has had experience with computer activities at the Defense Electronics Supply Center.

Robert L. Parke, Treasurer and Controller - age 35

Mr. Parke, a member of the American Institute of Certified Public Accountants, joined Anacomp in 1974, after serving as an accountant for Arthur Anderson and Company, and Blue and Company. He received his Bachelor of Science in business from Miami University in 1965, and went on to graduate from Indiana University in 1967 with his Masters in Business Administration.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

OUTSIDE DIRECTORS

Roy C. Echols - Business Consultant; also Licensed Life Underwriter, American United Life Insurance Company.

James D. Keckley - Executive Vice President, American Fletcher National Bank.

Stanley F. Kern, Ph.D. - Former Executive Director, Product Development, Eli Lilly and Company; now retired.

Anthony R. Lasich, M.D. - Orthopedic Surgeon.

John W. Biddinger - Executive Vice President, City Securities Corporation.

David H. Jones - Chairman of the Board of EDP.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

FINANCIAL RATIOS

Financial Ratios	FY 1976
Return on Investment - Net Income / Total Assets	12.14%
Return on Total Equity - Net Income / Shareholders' Equity	26.7%
Gross Margin - Income Before Taxes / Revenue	12.4%
Debt/Equity Ratio (Long Term Debt)	.1315
Stock Price Range	7.60 - 11.25*
Shares Outstanding	1,087,665**
Price Earnings Ratio, Based on Low Bid	9.9
Price Earnings Ratio, Based on High Bid	14.6
Earnings Per Share	.77
Cash Dividends Per Share	None
*Anacomp stock is traded on the Over-the-Counter Exchange. Its symbol is ANCM.	
**net of 150,000 treasury shares.	

Financial Data	FY 1976
Net Worth	$3,127,440
Working Capital	$1,161,491
Income Before Taxes	$1,589,905
Net Income	$ 835,395
Current Assets	$4,440,103
Current Liabilities	$3,278,612

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

ANACOMP, INC. AND SUBSIDIARIES
FIVE-YEAR SUMMARY OF OPERATIONS

	Year Ended June 30,				
	1976	1975 (restated)	1974	1973	1972
REVENUES	$12,850,946	$8,922,391	$6,031,078	$1,644,621	$1,488,297
OPERATING COSTS AND EXPENSES:					
Operating costs and expenses	10,483,245	7,159,143	5,064,722	1,567,351	1,605,482
Depreciation and amortization	872,773	690,283	280,124	76,236	81,077
	11,356,018	7,849,426	5,344,846	1,643,587	1,686,559
	1,494,928	1,072,965	686,232	1,034	(198,262)
OTHER INCOME (EXPENSE):					
Interest expense	(130,364)	(127,238)	(99,439)	(31,050)	(20,224)
Other	225,341	98,120	(60,018)	2,899	8,626
	94,977	(29,118)	(159,457)	(28,151)	(11,598)
INCOME (LOSS) BEFORE PROVISION FOR TAXES, MINORITY INTEREST AND EXTRAORDINARY ITEMS	1,589,905	1,043,847	526,775	(27,117)	(209,860)
PROVISION FOR INCOME TAXES	740,000	519,000	253,000	---	---
	849,905	524,847	273,775	(27,117)	(209,860)
MINORITY INTEREST	(14,510)	(8,376)	---	---	---
INCOME (LOSS) BEFORE EXTRAORDINARY ITEMS	835,395	516,471	273,775	(27,117)	(209,860)
EXTRAORDINARY ITEMS (a):	---	359,260	253,000	27,794	(295,042)
NET INCOME (LOSS)	$ 835,395	$ 875,731	$ 526,775	$ 677	$ (504,902)
Earnings (loss) per common and common equivalent share (b):					
Before extraordinary items	$.77	$.52	$.32	$ (.05)	$ (.49)
Extraordinary items	---	.36	.30	.05	.68
Net income (loss)	$.77	$.88	$.62	$.00	$ (1.17)
Earnings (loss) per common share assuming full dilution (b):					
Before extraordinary items	$.77	$.49	$.30		
Extraordinary items	---	.34	.27		
Net income (loss)	$.77	$.83	$.57		

(a) The extraordinary item in fiscal 1975 and 1974 represents the tax benefit derived from utilization of net operating loss carryforwards. The 1973 extraordinary item relates to a gain upon termination of a proposed merger. In 1972 extraordinary items relate primarily to a write down of learning center license rights and assets following management's decision to discontinue rendering services in the educational area and the write off of $85,500 of accumulated offering costs after termination of a plan for a public offering.

(b) All per share amounts for Anacomp have been retroactively adjusted to reflect the five for four stock split effected by a stock dividend distributed April 15, 1976. Earnings (loss) per share in 1973 and 1972 were not adjusted for dilution from options or warrants or other potentially dilutive securities because the effect on loss per share would have been anti-dilutive.

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

COMPANY HIGHLIGHT

ANACOMP, INC.
6161 Hillside Ave.
Indianapolis, Indiana 46220
(317) 257-6555

Ronald D. Palamara, President
and Chairman of the Board
Public Corporation

Total Company and Computer Services Sales
as of FY ending 6/76: ~~$10,800,000~~ $12 M fpe Sarah, Anacomp 4/15/76

NUMBER OF EMPLOYEES engaged in computer services: 460

KEY PRODUCTS/SERVICES: Anacomp provides facilities (resource) management, software products and remote computing services and COM, which account for 55%, 5%, 9% and 31% of sales respectively.

- Software Facilities Management and Teleprocessing division: provides facilities management and software to credit unions, banking and financial institutions and state governments. One of the larger facilities management contracts is with the Indiana Department of Revenue for $5.6 million over a three-year period. This division accounted for 60% of 1975 sales. Services are provided by these two subsidiaries:

 - Computer Accounting, Inc.,: provides some 15 credit unions with remote computing services.

 - Electronic Data Preparation Corporation of Florida: provides specialized software products and services to banking and thrift institutions.

- Computer Output Microfilm division: converts records into film. Ancillary products of this division, which represent a negligible portion of sales, include such items as COM recorders, microfilm cameras, reader printers, and readers. Now one of the largest sources of COM, this division plans to expand into business graphics. The COM division accounted for 31% of 1975 sales.

- On-line services division provides on-line transactions services to savings and loan associations. This division accounted for nearly 9% of 1975 annual sales.

APPLICATIONS: Speciality packages such as electronic funds transfer are designed for banks, saving and loan institutions and credit unions.

INDUSTRY MARKETS: Anacomp serves primarily the banking/finance/credit union industry and government, which account for 59% and 27% of sales respectively. The remaining 14% is distributed among several other industries, such as insurance and utilities. Bank customers include Manufacturers Hanover, Bank of California, Sumitomo, and Beaumont Bank.

COMPANY HIGHLIGHT/ANACOMP, INC.

GEOGRAPHIC MARKETS: Customers located in the North Central region of the U.S., particularly Indiana, account for 84% of sales. The Southeast represents 9% of sales, the Midwest 4% and the Northeast, South Central and Pacific States each 1%. Branch locations include offices in the following cities:

- Anderson, IN
- Bradenton, FL
- Cincinnati, OH
- Cleveland, OH
- Columbus, OH
- Dayton, OH
- Detroit, MI
- Manilla, Philippines
- San Francisco, CA
- Sarasota, FL
- St. Pierce, FL

COMPUTER HARDWARE AND SOFTWARE:

3	Burroughs	B-300
2	Burroughs	2700
3	NCR	300
3	NCR	200

OVERALL ASSESSMENT AND TRENDS: Founded in 1971, Anacomp has expanded quite rapidly, mostly through acquisition. The firm has acquired a total of nine companies of which the following were acquired in FY 1975.

- Electronic Data Preparation Corp, Florida, for $537,340
- Micrographic Data Services, Inc., Ohio, for $163,836
- EDP of Indiana, Indiana, for $322,547
- Computer Micro Services, Inc., for $120,000

Earlier acquisitions include:

Micromation, Inc.
American Information Systems, Inc.
Computer Techniques, Inc.
Technicon

Currently Anacomp is negotiating with Midwest Computer Services. Anacomp also offered to purchase outstanding shares of Computer Usage Company for about $4.1 million of Anacomp stock but the offer was subsequently rejected by CUC. Anacomp stock is currently traded over the counter. The firm has paid no dividends to date.

Among Anacomp's more recent achievements are its $5.6 million facilities management contract with the Indiana Department of Revenue and subcontracting to NCR to develop the software package for Social Security for the Republic of the Philippines and an agreement for NCR to market bank software.

COMPANY HIGHLIGHT/ANACOMP, INC.

Anacomp is targeting facilities management software development and to some extent COM services. While it presently supplies microprocessors such as the NCR 42, and 270 to savings and loan institutions, the firm has encountered some problems and is de-emphasizing this type of business. Anacomp regards credit union services to have far more potential. The table on the next page shows Anacomp's past concentration by segment of the computer services industry.

ANACOMP

Distribution of Revenues by Division of Company
Percent of Revenues, 1971-1975

Division \ Year	1971	1972	1973	1974	1975
On-line Services	36.2%	31.2%	35.5%	11.1%	8.5%
Software Facilitie Management and Teleprocessing	31.4%	37.9%	39.2%	60.6%	60.1%
Computer Output Microfilm	4.9%	22.7%	25.1%	28.3%	31.4%
Other	27.5%	8.2%	.2%	0%	0%
Total Revenues	$1,123,717	$1,488,297	$1,644,621	$6,031,078	$8,922,391

Acquired by National Life and Trust Computer Services, Nashville

cc Robert H. Osterman MKt Mgr

COMPANY HIGHLIGHT

7/1/77

John McBride Head Mgr Beloit

ANALYSIS AND PROGRAMMING
423 State Street
Beloit, WI 53511
(608) 365-2206

Walter B. Nelson, President
Wholly owned subsidiary
of Analysis and Programming Corp, Greenwich, CT
Total employees: 40
Total revenues, fiscal year end 7/31/77: $1.75M*

COMPANY BACKGROUND

- Analysis and Programming Corporation (APC-Beloit) was founded in 1965 as Beloit Computer Center, a data processing service bureau wholly owned by Beloit Corporation. Beloit Computer Center was acquired by Axia Systems of Chicago, Illinois in June 1973 and by Analysis and Programming Corporation (APC) of Greenwich, Connecticut in August 1975. In August 1976 its name was changed to conform to the rest of the APC organization. This report discusses the Beloit subsidiary only, which is referred to as APC-Beloit.

- Although APC-Beloit still derives much of its revenues from batch data processing, it also offers remote computing and word processing services to many of its 250 users.

OVERALL ASSESSMENT

- APC-Beloit word processing and RJE services can access each other. Text/Master, the word processing service, has some data processing capabilities. The company stresses that service and customer satisfaction are high priority items.

- APC-Beloit has expanded its product line since its inception and is continuing to search for new, improved service offerings, but has been cautious about expanding its geographic market. It is currently still centered around its home base of Wisconsin. Although the company plans to expand services to some additional geographic areas, it does not intend to spread them nationwide.

- APC-Beloit's major competitors are Proprietary Computer Systems (PCS), Los Angeles, and Bowne Timesharing, New York. PCS, Bowne, and APC-Beloit all provide a word processing service based on the IBM ATS (Administrative Terminal System) package. Although APCBeloit is smaller than its two major competitors, it seems to be firmly entrenched in the North Central states, with the more than 200 users (100 for Text/Master) there generating 96% of revenues.

*Estimate by Analysis and Programming

© Copyright 1977 by INPUT, Menlo Park, CA
Reproduction Prohibited

KEY PRODUCTS AND SERVICES APC-Beloit expects to derive 40% of its 1977 revenues from remote computing services. Batch data processing will generate 35% and word processing 25%.

- Remote computing and batch processing services include payroll, accounts reveivable and payable, general ledger, and other general business applications; financial modeling; compilation and testing of computer programs; manufacturing systems; government information systems; school grading and scheduling; and automated mailing list and document preparation.

- Text/Master is an online interactive word processing and data management control system for the manipulation and formating of large data bases. Accessed by remote terminals, Text/Master utilizes English language commands to perform photocomposition (SUPER-COMP), file conversion and maintenance, mailing lists, forms and document preparation, problem solving, personnel files, research, text editing, text merging, source data entry, remote data processing, post processing, data formating, and information retrieval.

- In some cases, custom developed timesharing programs have been offered on the system as standard products.

APPLICATIONS Sixty-five percent of APC-Beloit applications is general business. Twenty-five percent is word processing, 5% is scientific and engineering, and 5% is specialty.

INDUSTRY MARKETS Forty percent of APC-Beloit revenues in 1977 will be generated by the discrete manufacturing industry, as shown below:

Manufacturing - discrete	40%
Government - state and local	30%
Education	15%
Banking and finance	5%
Distribution - retail	5%
Other - printing and publishing	5%
	100%

© Copyright 1977 by INPUT, Menlo Park, CA
Reproduction Prohibited
April/1977

GEOGRAPHIC MARKETS Ninety-six percent of APC-Beloit revenues is derived from the North Central states. The remaining 4% is from the Northeast, Southeast, and Midwest. APC-Beloit has sales offices in Minneapolis and Chicago. Its parent, APC, has offices in Greenwich, Connecticut; Washington, D.C.; Memphis, Tennessee; and a data entry facility in Grenada, West Indies.

COMPUTER HARDWARE AND SOFTWARE

- APC-Beloit owns an IBM 360/65 with OS/MVT and HASP. It uses an IBM 3705 communications controller and the following other equipment:

Telex 3330 and 2314-equivalent disk drives	24
Telex 3420-type tape drives	7
IBM 1403 line printer	1
Data 100 programmable terminal	4
IBM 2922 programmable terminal	1

- The company supports 15, 30, and 120 cps terminals with ASCII or EBCDIC codes. Users are responsible for supplying their own in-house equipment. Some users have installed Datapoint 1100 and 2200 minicomputers for word processing and business processing.

- Text/Master is accessed in several major cities through a combination dial-up, micro-wave, and hard-wire circuit network.

© Copyright 1977 by INPUT, Menlo Park, CA
Reproduction Prohibited
April/1977

ANALYTICAL TECHNOLOGIES, INC. (ANATEC[R])
30300 Telegraph Road
Suite 200
Birmingham, MI 48010
(313) 540-4440

Al Schornberg, President and CEO
Private Corporation
Total Employees: 165 (6/89)
Total Revenue, Fiscal Year End
12/31/88: $8,200,000

The Company

Analytical Technologies, Inc. (ANATEC[R]), was incorporated in 1980 to provide consulting and programming services to the MIS departments of Fortune 500 corporations and government agencies.

ANATEC was recognized by *INC.* Magazine as one of America's 500 fastest growing privately held companies.

Total 1988 revenue reached $8.2 million, an 11% increase over 1987 revenue of $7.4 million. A five-year revenue summary follows:

ANALYTICAL TECHNOLOGIES, INC.
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR				
ITEM	12/88	12/87	12/86	12/85	12/84
Revenue	$8.2	$7.4	$5.3	$4.4	$4.4
• Percent increase (decrease) from previous year	11%	40%	31%	–	88%

Revenue for the five months ending May 31, 1989 was approximately $3.8 million, a 9% increase over $3.5 million for the same period in 1988.

ANATEC has three divisions, headquartered in Birmingham:

- The Government Services Division provides professional services to the federal government.

Copyright 1989 by INPUT. Reproduction Prohibited.

- The Manufacturing/Engineering Division (M/E) specializes in the manufacturing industry.
- The Relational Database Services Division provides relational data base, consulting, and software development services to various businesses.

Major competitors by markets served include the following:

- Government agencies: Computer Sciences Corporation (CDC) and Electronic Data Systems (EDS).
- Manufacturing and other private sectors: Computer Task Group and the major accounting firms.

Key Products and Services

Approximately 40% of ANATEC's 1988 revenue was derived from systems integration, 31% from software development, 10% from custom turnkey systems, and 19% from consulting/education.

ANATEC provides professional services to approximately twenty Fortune 500 clients. ANATEC's current engagements are broken down into 40% project management, 40% time and materials, and 20% fixed price. A partial list of ANATEC's hardware, software, and language capabilities is shown in Exhibit A. ANATEC's professional services include:

- Application programming and development
- Artificial intelligence systems
- Capacity planning
- Contract programming
- Data administration
- Data integrity management
- Decision support systems
- Documentation
- Education and training
- Engineering services
- Facilities management
- Feasibility studies
- Information resource management planning
- Information needs analysis
- Information engineering
- Management consulting
- Manufacturing systems
- Management information systems
- Micro, mini, and mainframe systems

Copyright 1989 by INPUT. Reproduction Prohibited.

EXHIBIT A

ANALYTICAL TECHNOLOGIES, INC.
PROFESSIONAL SERVICES CAPABILITIES

Hardware
- Honeywell
- Harris
- Sperry
- IBM PC
- Data General
- Novell LANs
- IBM 308X, 303X
- IBM 43XX
- IBM Series 1
- IBM 370
- UNIVAC
- HP 1000
- Tandem
- Burroughs
- Amdahl
- DEC PDP
- DEC VAX
- HP 3000
- Sun
- Apollo

Operating Systems
- GCOS 8
- GCOS 6
- UNIX
- MS DOS
- RSX
- PC DOS
- MVS/XA
- TOPS-10
- TOPS-20
- DOS/VX
- RT-11
- RSTS
- VMS
- AOS/VS
- VM/CMS
- EDX
- OS
- VS
- CP/M
- MVS

Languages/Software
- FOCUS
- INGRES
- DB2
- MARK IV, V
- ALC
- CICS/MACRO
- APL, APL *PLUS
- TAL
- ICCF
- DYNAM/T/D
- VSAM
- Graphics
- ALGOL
- EXEC
- EASYTRIEVE
- COM-PLETE
- SYBASE
- DBASE III+
- FORTRAN
- ORACLE
- IMS/DB/DC
- DATA DICTIONARY
- DATATRIEVE
- BASIC
- ADRS
- DECNET
- LIBRARIAN
- Spreadsheets
- COBOL
- PREDICT
- UFO
- RPG
- BAL
- POWERHOUSE
- ADABASE/NATURAL
- PL/1
- DL/1
- CICS/COMMAND
- ADL
- PANVALET
- FPS
- SNA
- DMS
- C
- TSO
- ASSEMBLER

Copyright 1989 by INPUT. Reproduction Prohibited.

- Project management
- Security and security systems
- Systems software development
- Systems tuning
- Systems integration

ANATEC provides custom software for a variety of industry applications. Exhibit B is a brief overview of those applications:

EXHIBIT B

ANALYTICAL TECHNOLOGIES, INC.
INDUSTRY/APPLICATION CAPABILITIES AND EXPERIENCE

Manufacturing
- Robotics
- Process Control
- Inventory Control
- Order Processing
- Production Control
- Bill of Material
- Integrated Purch/Expedit/Rec'ng
- Parts Control
- Material Handling
- Sales Analysis
- Manufacturing Control Production
- Cost Accounting
- Service Parts Scheduling

Software
- Data Communications
- File Conversions
- Program Development Aids
- Test Data Generators
- Database Management
- Hardware Analysis
- Feasibility Studies
- Systems Programming

Financial
- Payroll
- General Ledger
- Accounts Payable
- Accounts Receivable
- Mortgage
- Direct Deposit
- Automatic Teller
- Trading

Hospital
- On-line Admissions
- Physician and Clinic Billing
- Shared Medical System
- Insurance Log Reporting

Government
- Electromagnetic Research
- Force Accounting
- Circuit Court
- District Court
- Case Information and Control
- Central Pay and Leave
- Regulatory Information Management
- Finance and Accounting
- Real Estate
- Library Map Tracking
- Reprographics

Oil and Gas
- Gas Well Accounting
- Gas Contracts
- Gas Tax Planning
- Lease Support System
- Crude Oil Accounting

Insurance
- Insurance Consolidation System
- Insurance Reporting
- Claim System
- On-line Membership
- Home-Owners/Boat Owners
- Membership and Billing

Merchandising
- Distributed Processing
- Sales System
- Shop Scheduling and Reporting
- Inventory
- Advertising Accounting
- Point of Sale

Copyright 1989 by INPUT. Reproduction Prohibited.

Professional services contracts include:

- Developing a system map of applications, programs, and data on the Novell s-Net LAN for the Resource Management Officer, Corps of Engineers. ANATEC developed programming specifications for data input, data protection upon certification, printing of paper checks, and verification of the commercial accounts payment operations on this same system. Procedures and programs for interfacing this operation with the Honeywell DPS8 mainframe system called COEMIS FA were also developed.

- System development and maintenance support for the Engineering Financial Systems of a major automotive manufacturer, involving conversion of existing COBOL systems to FOCUS. ANATEC consultants are providing all project management and technical support, including staffing, status reporting, and end user training to deliver the functional systems.

- Developing the Hermosillo Material Control system for a stamping and assembly plant in Hermosillo, Mexico. Applications include bill of material, parts file, preventive maintenance, customer data, metals records, parts history, contract tracking, and financial.

- Developing a mechanical sketch system which mechanically generates usage condition codes and assigns file control numbers to driveline, coupling shaft, and support bracket parts that have been selected by a drafting design run.

- Customizing a personnel software package (IDS) to meet the needs of the client. Applications include Hourly Payroll, Salary, Retirement, and Pension.

- Developing cost tracking system for long term BC/BS-covered patients. ANATEC provided the general design and wrote the programs for each of the three departments involved with the system (Discharge Planning, Case Management, and BC/BS accounts using case management). ANATEC also provided a user manual and initial user training.

Industry Markets

Approximately 50% of ANATEC's 1988 revenue was derived from the automotive industry, 15% from the federal government, 13% from insurance and healthcare, 10% from petrochemical, and 10% from food and beverage, financial, and other manufacturing industries.

Copyright 1989 by INPUT. Reproduction Prohibited.

Clients include Ford Motor Company, Continental Bank, Burlington Northern, Chrysler Corporation, 3M Company, U.S. Army Corps of Engineers, and Blue Cross/Blue Shield of Michigan.

ANATEC has strategic partnerships with Sybase and Relational Technologies, Inc. ANATEC is providing consulting services for product development.

Geographic Markets

Approximately 97% of ANATEC's 1988 revenue was derived from the U.S and the remaining 3% was from England.

ANATEC is headquartered in Birmingham (MI), and has branch offices in Omaha (NE), Clearwater (FL), and St. Paul (MN).

ANATEC has field service personnel located in Dallas (TX), North Haven (CT), Milwaukee (WI), and Atlanta (GA).

Computer Hardware and Software

The company currently has one DEC MicroVAX II operating under VMS installed at its headquarters in Birmingham. INGRES and SYBASE are currently supported.

Copyright 1989 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

ANALYTICAL TECHNOLOGIES, INC.
30300 Telegraph Road
Suite 184
Birmingham, MI 48010
(313) 540-4440

Al Schornberg, President
Private Corporation
Total Employees: 102
Total Revenue, Fiscal Year End
12/31/86: $5,301,000

THE COMPANY

- Analytical Technologies, Inc. (ANATEC) was incorporated in 1980 by Al Schornberg to provide consulting and programming services to the management information systems departments of large corporations. Currently, ANATEC offers a range of professional services and customized turnkey systems to the federal government and a variety of industries, including manufacturing.

- Fiscal 1986 revenue reached $5.3 million, a 31% increase over fiscal 1985 revenue of $4 million. Net income for the year was $238,000. A five-year revenue summary follows:

ANALYTICAL TECHNOLOGIES, INC.
FIVE-YEAR REVENUE SUMMARY
($ thousands)

ITEM \ FISCAL YEAR	12/86	12/85	12/84	12/83	12/82
Revenue	$5,301	$4,045	$4,368	$2,329	$764
. Percent increase from previous year	31%	(7%)	88%	205%	105%

- Revenue for the three months ending March 31, 1987 was approximately $1.7 million, a 70% increase over $1 million for the same period in 1986. Net income reached $122,500 for the quarter.

- ANATEC has three divisions:

 - Government Services Division headquartered in Birmingham provides professional services to the federal government.

 - Manufacturing/Engineering Division located in Birmingham specializes in the manufacturing industry.

 - Business Applications Division located in Birmingham provides consulting and software development services to various businesses.

©1987 by INPUT. Reproduction Prohibited.

- As of December 1986, ANATEC had 102 employees. The company currently has 135 employees.

- Major competitors by markets served include the following:

 - Government agencies: Computer Sciences Corporation and Electronic Data Systems.

 - Manufacturing and other private sectors: Computer Task Group and the "Big 8" accounting firms.

KEY PRODUCTS AND SERVICES

- One hundred percent of ANATEC's 1986 revenue was derived from its various professional services. A further breakdown of source of revenue follows:

Systems integration	50%
Software development	31
Custom turnkey systems	10
Consulting/education and training	9
	100%

- ANATEC's professional services include:

 - The development of data base management systems within a fourth generation technology environment for project management, user interfaces, system design, and analysis.

 . The company is responsible for developing the Mortgage Default Control program (MDCP, a.k.a. Modcop). The system development is occurring on a VAX 8650 using INGRES.

 - Providing computer integrated manufacturing (CIM) solutions to the manufacturing industry through ANATEC's Manufacturing/Engineering Division (M/E).

 . M/E offers a range of services in shop floor automation, manufacturing resources planning (MRP II), and engineering systems.

 - Assisting customers in designing, implementing, and using PC applications. Systems consulting is provided by ANATEC's PC Department.

 . The PC Department serves the large computer and data processing departments of major corporations.

 . The company also customizes off-the-shelf software packages.

©1987 by INPUT. Reproduction Prohibited.

- Providing systems engineering, programming, documentation, and training services to the government.

 - The Government Services Division has a three-year contract with The Army Corps of Engineers in Omaha.

- The company offers customized financial turnkey systems using the INGRES environment primarily for the manufacturing and insurance industries.

INDUSTRY MARKETS

- ANATEC provides its services to various industries including government, manufacturing, engineering, insurance, health care, distribution, banking and finance, transportation, oil, and gas.

- Approximately 5% of the company's fiscal 1986 revenue was derived from the federal government.

- Clients include Ford Motor Company, Chrysler Corporation, Allied Corporation, Phillips Petroleum, Warner-Lambert, Michigan Conferences of Teamsters Welfare Fund, Travelers Express, Blue Cross, and 3M Company.

GEOGRAPHIC MARKETS

- One hundred percent of the company's fiscal 1986 revenue was generated from the U.S.

- The company has branch offices located in Minneapolis, Washington, D.C., Omaha (NE), and Milwaukee.

COMPUTER HARDWARE AND SOFTWARE

- The company currently has one MicroVAX II operating under VMS and INGRES installed at its headquarters in Birmingham.

©1987 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

ANALYTICS, INC.
2500 Maryland Road
Willow Grove, PA 19090
(215) 657-4100

Stephen Liebholz, President
Private Corporation
Total Employees: 215
Total Revenue, Fiscal Year End
12/31/80: $10,000,000*

PRINCIPAL BUSINESS

- Analytics, an employee-owned systems analysis and engineering corporation established in 1967, provides professional services in areas of weapon systems development and acquisition; command, control, and communications systems; intelligence, surveillance, fire detection, and electronic warfare systems; and automation technology.

FINANCIALS

- INPUT estimates Analytics' 1980 revenue was $10 million, an increase of 25% over the 1979 revenue estimate of $8 million.
- Analytics has been profitable since its formation and reported a higher profitability rate was achieved during the last two years.

SOURCES OF REVENUE

- The majority of Analytics' revenue is derived from professional services. Other revenue comes from the sale of specialized communications hardware, turnkey systems, and software packages.

ORGANIZATION

- Scientific and Operations Analysis Group.
- Communications and Information Systems Group.
- Systems Evaluation and Configuration Management Group.

EMPLOYEES

- Analytics' professional staff comprises analysts, scientists, mathematicians, engineers, management scientists, systems analysts, and programmers.

PRODUCTS AND SERVICES

- The Scientific and Operations Analysis Group (SOAG) specializes in operations research, physical and operational systems analysis, man-machine engineering, and scientific research applied to air tactical warfare systems, sensors,

*INPUT estimate

©1981 by INPUT. Reproduction Prohibited.

signature exploitation systems (stationary and dynamic), manned system performance assessment and enhancement, and command, control, communications, and intelligence (C^3I) systems. The Group includes two divisions: Scientific Analysis Division and Operations Analysis Division.

- The Scientific Analysis Division evaluates defense system performance, including the systems analysis, modeling, and simulation of electro-optical/radio frequency (EO/RF) systems, the development of human engineering technology, the automation of decision-making procedures, and the execution of system performance studies.

 - The Division studies EO/RF aspects of surveillance/attack aircraft, ground control sites, and air-to-air and air-to-ground guided weapons in a variety of operational and physical environments. Programs investigate and model target signature properties, sensor characteristics, signal processing methods, and techniques for reducing attack vulnerability.

 - In the area of human engineering technology development, the Division studies man-machine interaction dynamics to optimize human performance in physical and decision-making roles. The Division also studies intelligence extraction techniques as an aid to decision automation.

 - Systems performance studies that relate to the effectiveness and reliability of complex weapon systems are also conducted.

 - Studies of these technical areas require the planning of experiments and acquisition of data relevant to system performance, the development and application of analysis procedures including modeling and simulation, and the reduction of data produced by experimental programs.

 - Major simulation efforts include software architecture development, scientific programming, and verification and validation of the basic models of underlying physical processes being simulated. Data processing techniques are applied to organize extensive bodies of experimental results into remotely accessible computerized data bases for immediate analysis and future reference.

- The Operations Analysis Division performs operations research, tactical modeling, military operations planning, data base management, and software development for air, land, and sea-based warfare.

 - Divisional specialities include the determination of functional requirements for C^3I and the development of appropriate C^3I architectures.

©1981 by INPUT. Reproduction Prohibited.

- The Division develops battle management concepts and conducts operational-effectiveness and trade-off analyses for systems and sensors.

- Other areas of experience are tactical software embedded decision aiding and decision automating techniques, particularly in the development of concepts, functional requirements, and evaluation criteria.

- The Communications and Information Systems Group (CISG) evaluates, designs, develops, and tests a variety of hardware and software systems for communications, information processing, and intelligence applications. Projects performed include applied research in communications and information processing; system and equipment design, engineering, and implementation; automated test and evaluation; advanced narrative information systems development; and special purpose hardware fabrication for unique, limited-quantity applications. The Group includes three divisions: Information Systems Division, Communications Systems Division, and Digital Systems Analysis Division.

 - The Information Systems Division performs network analysis, design engineering, and systems engineering, and implements, installs, and tests computer software systems.

 - Systems are designed for a variety of equipment including IBM, Univac, Honeywell, Xerox, Prime, DEC, Control Data, Burroughs, Computer Automation, Rolm, and Norden.

 - Languages used include assembler, data base management, and higher-order such as COBOL, FORTRAN, PASCAL, PL/1, CMS-2, BASIC, RPG, SIMSCRIPT, TACPOL, ALGOL, SNOBOL, and JOVIAL.

 - The Communications Systems Division develops microprocessor-based communications interfaces, terminals, and controllers.

 - Engineering, design, fabrication, installation, checkout, and service of microprocessor products are provided.

 - Turnkey devices for message switching and other communications-related applications have been developed.

 - The Division developed the SHERLOCK™ information security system, a series of encryption products for terminal to terminal or terminal to computer transmission, as well as file protection.

 - SHERLOCK Telecommunication Line Encryptors are transparent to the data and user, automatically encrypting data before transmission.

©1981 by INPUT. Reproduction Prohibited.

- SHERLOCK includes AUTHENTI-KEY™, an electronic key for access to the SHERLOCK system. Each authorized user has a key, eliminating password problems and secret codes.

- SHERLOCK is also available as a file protection software product operating on DEC VAX-11/780 or downward-compatible DEC computers, either under VAX/VMS or UNIX operating environments.

- The Digital Systems Analysis division performs two major activities:

 - Evaluation, design, and development of turnkey systems for narrative information (such as publishing and translation).

 - Marketing MIDAS (Multi-User Interactive Document Automation System), a software product which automates the preparation, editing, and composition of handbooks, catalogs, manuals, dictionaries, etc., and offers foreign language text and translation capabilities.

- The System Evaluation and Configuration Management (SENCOM) Group provides technical and management support in the development, acquisition, and operation of sensor, communications, data processing, display, and weapons technology systems. The Group includes five divisions: System Support Division, Technical Services Division, System Analysis and Engineering Division, Engineering Support Division, and Special Projects Division.

 - The System Support Division emphasizes planning, systems integration and interoperability engineering, and logistic support for complex systems related to target acquisition, artillery fire direction, and command and control data; and sensor, data-processing, and display hardware and software.

 - The Technical Services Division emphasizes planning, technical and cost-effectiveness analysis, and interfaces engineering for advanced systems. Program support for the acquisition of tactical and strategic communications systems; voice and data communications and signal-processing equipment development; and interoperability analysis and engineering for communications systems are provided.

 - The Special Projects Division provides comprehensive services and management for the planning, design engineering, procurement, installation, documentation, and operational support of systems equipment and facilities, including: communications and computer-aided dispatch systems for police, fire, and emergency medical service agencies; communications links among local, state, and federal law enforcement information systems; and civil and military physical security systems.

- Analytics has Top Secret facility clearances and has a Sensitive Compartmented Intelligence facility.

©1981 by INPUT. Reproduction Prohibited.

INDUSTRY MARKETS

- The majority of Analytics' revenue is derived from defense agencies in the federal government. Additional revenue comes from manufacturers (subcontract work) and the ~~utilities industry~~ (nuclear systems).

GEOGRAPHIC MARKETS

- Almost all revenue is derived from ~~the~~ U.S.
- In addition to its headquarters, Analytics maintains two major technical facilities in McLean (VA) and Tinton Falls (NJ). Other facilities are located in Fort Walton Beach (FL), Dayton (OH), Billerica (MA), and Huntsville (AL).

COMPUTER HARDWARE

- Analytics has a number of DEC (including VAX 11/780) and Computer Automation 470 systems installed.

©1981 by INPUT. Reproduction Prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

January 1997

Analysts International Corporation

Chairman & CEO: Frederick W. Lang
President & COO: Victor C. Benda
7615 Metro Boulevard
Minneapolis, MN 55439-3050
Phone: (612) 835-5900
Fax: (612) 897-4555
Internet: http://www.analysts.com

Status:	Public
Employees:	4,050 (9/96)
Revenue:	$ 329,544,000
Fiscal Year End:	6/30/96

Key Points

- Analysts International Corporation (AiC) is a leading provider of professional services, with 29 branch and 12 field offices in North America.
- AiC served 840 clients on a total of 5,800 projects during fiscal 1996.
- Revenue growth of 51% during fiscal 1996 was attributed primarily to major outsourcing contracts with U S WEST and IBM.
- In July 1996, AiC expanded its operations in California with the acquisition of San Jose-based DPI, Inc.
- In August 1996, AiC announced its Year 2000 practice to assist companies in solving Year 2000 problems.

Company Description

AiC was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. Since its inception, AiC has completed more than 10,000 projects for more than 4,500 clients.

© INPUT 1997. Reproduction prohibited.

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

Operations and Structure

AiC is currently organized into five U.S. geographic regions, each managed by a regional vice president. These regions are Eastern, Central, Midwest, Western, and Southern.

AiC provides its services through its branch and field offices, assigned on a geographic basis to one of the five regions.

- Each branch office is staffed with technical personnel and managed by a branch manager who has primary responsibility for the administration, personnel, recruiting, customer relations, and profitability of the branch.
- The branch manager has broad authority to conduct the operations of the branch, subject to adherence to corporate policies.
- In general, field offices are established to support specific projects for one or more specific customers at locations not served by a local branch office and are managed by a branch office when the volume of business and the prospects for additional business justify the additional location expenses associated with branch-office status.

Regional offices are in Indianapolis (IN), New York (NY), St. Louis (MO), Atlanta (GA), and San Francisco (CA).

Branch offices are in Atlanta (GA); Austin, Dallas, and Houston (TX); Bellevue (WA); Boca Raton and Tampa (FL); Cleveland, Columbus, and Mason (OH); Concord, Irvine, and San Jose (CA); Denver (CO); Indianapolis (IN); Iselin (NJ); Kansas City and St. Louis (MO); Lexington (KY); Minneapolis and Rochester (MN); Morrisville (NC); New York City and Rochester (NY); Omaha (NE); Phoenix (AZ); Schaumburg (IL); Southfield (MI), and Tulsa (OK).

AiC has field offices in Akron/Canton (OH), Boston (MA), Boulder (CO), Charlotte (NC), Danbury (CT), Des Moines (IA), Miami (FL), Philadelphia (PA), Portland (OR), Sacramento (CA), Washington, D.C., Toronto (Ontario, Canada), and Cambridge (England).

AiC TechWest, headquartered in Denver, manages the company's U S WEST business.

AiC IBM Project Support Office, based in Tampa (FL), manages the company's IBM business.

Financials

Fiscal 1996 revenue reached $329.5 million, a 51% increase over fiscal 1995 revenue of $218.4 million. Net income increased nearly 10%, from $11.3 million in fiscal 1995 to $12.4 million in fiscal 1996.

A five-year financial summary is shown on the following page.

Revenue increased approximately $111 million in fiscal 1996.

- Revenue from outsourcing contracts with U S WEST and IBM, which began in June and August of 1995, respectively, accounted for slightly over 50% of the fiscal 1996 increase.
- Excluding revenue from these two sources, fiscal 1996 revenue increased 22% over fiscal 1995 levels due primarily to increases in billable hours of service rendered to clients. Rate increases have not contributed significantly to revenue increases because of prevailing competitive conditions that have made it difficult for the company to increase the hourly rates it charges for its services.

© INPUT 1997 Reproduction prohibited.

Analysts International Corporation
Five-Year Financial Summary
($ Millions, except per-share data)

	Fiscal Year				
Item	6/96	6/95	6/94	6/93	6/92
Revenue	$329.5	$218.4	$176.0	$159.7	$129.6
• Percent change from previous year	51%	24%	10%	23%	11%
Income before taxes	$20.7	$18.5	$12.8	$13.5	$8.7
• Percent change from previous year	12%	45%	(5%)	55%	(3%)
Net income	$12.4	$11.3	$8.0	$8.3	$5.4
• Percent change from previous year	10%	42%	(4%)	54%	(4%)
Earnings per share	$0.84	$0.78	$0.55	$0.58	$0.38
• Percent change from previous year	8%	42%	(5%)	53%	(4%)

Salaries, contracted services, and direct charges, which represent AiC's direct labor costs, rose to 76.6% of revenue in fiscal 1996, compared to 71.3% of revenue in fiscal 1995 and 70.5% of revenue in fiscal 1994. The increases in fiscal 1996 were due to the U S WEST and IBM contracts. AiC uses subcontractors to augment its capacity as needed.

During fiscal 1996, AiC had revenues of $87,412 per employee, compared with $68,904 per employee in fiscal 1995.

Interim Results

Revenue for the three months ending September 30, 1996 reached $98.0 million, a 34% increase over $73.1 million for the same period in 1995.

- Revenues for this year's period include $20 million of pass-through billings from subcontracts under national contracts with U S WEST. These pass-through billings have the effect of reducing the company's margins.
- Net income rose 38%, from $2.8 million to nearly $3.9 million.

Market Financials

AiC derives its revenue from a range of commercial industry clients; its largest client is IBM.

A three-year summary of revenue sources by industry served, as provided by AiC, is shown on the following page.

© INPUT 1997 Reproduction prohibited.

Analysts International Corporation
Three-Year Source of Revenue Summary

	Fiscal Year		
Industry	6/96	6/95	6/94
Telecommunications	29%	17%	8%
Electronics	23%	27%	37%
Services	10%	12%	7%
Manufacturing	9%	11%	10%
Banking and finance	5%	7%	8%
Oil and chemical	5%	6%	6%
Merchandising	4%	4%	4%
Food	3%	4%	4%
Insurance/health care	5%	4%	5%
Power and utility	2%	2%	3%
Government	2%	1%	1%
Transportation	1%	2%	5%
Other	2%	3%	2%
TOTAL	100%	100%	100%

Source: AiC

AiC derived approximately 18% ($59.3 million) of fiscal 1996 revenue, 20% ($43.7 million) of fiscal 1995 revenue, and 29% ($51.0 million) of fiscal 1994 revenue from various operating units and divisions of IBM.

AiC derived approximately 23% ($75.8 million) of fiscal 1996 revenue, 6% ($13.1 million) of fiscal 1995 revenue, and 4% ($4.4 million) of fiscal 1994 revenue from U S WEST.

Geographic Markets

Approximately 95% of AiC's revenue is derived from the U.S. and 5% from international sources.

Acquisitions

In July 1996, AiC acquired the software services business of DPI, Inc. of San Jose (CA) for $5.65 million in cash.

- DPI, with 1995 revenue of $11 million, provides programming and consulting services to corporations in the San Francisco Bay Area. DPI is also developing a suite of software products for use with Lotus Notes and provides Lotus Notes consulting and related services.
- The acquisition expands AiC's share of the very large market for software services in the Bay Area.

Employees

As of June 30, 1996, AiC employed 3,770 people, of which 95 were sales staff, 100 recruiting staff and approximately 3,200 were systems analysts, computer programmers, and other technical personnel whose services are billable to clients.

As of September 1996, AiC had approximately 4,050 employees.

© INPUT 1997 Reproduction prohibited.

Key Products and Services

Virtually 100% of AiC's fiscal 1996 revenue was derived from professional services.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include the following:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including database management systems, compilers, and operating systems
- Scientific, specialized control, and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development
- Programming, implementation, maintenance, testing, and documentation
- Special-purpose systems design and/or modifications, timeshare, process control, and medical systems
- Systems orientation and training seminars
- Technical audits
- Equipment evaluation and requirements analysis
- Systems resource analysis
- Year 2000 conversions

In June 1995, AiC entered into a three-year agreement with U S WEST under which AiC will be the principal vendor providing technical personnel to U S WEST's data processing operations.

- At present levels of support, the contract will add approximately $50 million to AiC's annual revenue.
- In addition to the approximately 220 programmers and other technical personnel it had on assignment at U S WEST as of June 30, 1996, AiC also is responsible for managing subcontractors who provide approximately 700 technicians.

During fiscal 1996, AiC provided services through substantially all of its branch offices to various divisions of IBM.

- As of July 29, 1995, AiC was named one of four primary vendors to IBM in three IBM regions and one of four secondary vendors in IBM's two other regions.
- Hourly rates for services provided to IBM under this arrangement are very competitive and as a result the profit margin from IBM business is expected to be lower. The lower margin may be offset by a higher volume of business.

Examples of AiC projects during fiscal 1996 include the following:

- Developing design specifications for updating a Project Management Information System for BASF Corporation
- Designing, developing, and implementing a new sales and marketing system for M.A. Hanna Company

© INPUT 1997 Reproduction prohibited.

- Designing and developing a new international pricing system for United Van Lines

Examples of AiC projects during fiscal 1995 include the following:

- Providing consulting, programming, and technical staff to TransQuest, a Delta Air Lines subsidiary that provides information systems and services to the travel and transportation industries
- Providing consulting and conversion support to the Omaha Housing Authority
- Developing, implementing, and supporting custom software for an on-line delivery system at Key Services Corporation
- Enhancing, modifying, and supporting legacy software in the financial systems area of 3M
- Design and development of customer software in support of a traffic management system for Maritz Performance Improvement Company

Marketing and Sales

AiC sells its services through its own direct sales force located at its branch offices.

Competitors

National competitors include professional services divisions of large companies such as IBM and Digital. AiC also competes with other national professional services companies such as Andersen Consulting, Computer Task Group, CGA, Keane Inc., Computer Data Systems, and Computer Horizons.

AiC branch locations compete with various local professional services firms.

INPUT Assessment

AiC is a strong participant in a large market.

The AiC branch-office structure allows the company to react quickly to local market changes and will help provide the flexibility that will be necessary for success in the future. The extensive network of branch and field offices also will provide a safeguard against regional business fluctuations.

A potential problem for AiC is competition from small professional services companies, as the low overhead of these small companies allows them aggressive pricing.

© INPUT 1997 Reproduction prohibited.

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

January 1996

Analysts International Corporation

Chairman & CEO: Frederick W. Lang
President & COO: Victor C. Benda
7615 Metro Boulevard
Minneapolis, MN 55439-3050
Phone: (612) 835-5900
Fax: (612) 897-4555

Status:	Public
Employees:	3,350 (9/95)
Revenue:	$ 218,426,000
Fiscal Year End:	6/30/95

Key Points

- Analysts International Corporation (AiC) is a leading provider of professional services, with 27 branch and 12 field offices in North America.
- AiC served 740 clients on a total of 3,835 projects during fiscal year 1995.
- Revenue growth of 24% during fiscal 1995 was attributed primarily to growth in services provided to the telecommunications and services industries.
- In July 1995, AiC signed a major outsourcing contract with U S WEST under which AiC is the principal vendor supplying leased technical personnel to U S WEST's data processing operations.
- In July 1995, the number of branch offices grew to 27 with the addition of Cincinnati and Tulsa.

© INPUT 1996. Reproduction prohibited.

Company Description

AiC was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. Since its inception, AiC has completed more than 10,000 projects for more than 4,500 clients.

Operations and Structure

AiC is currently organized into five U.S. geographic regions, each managed by a regional vice president. These regions are Eastern, Central, Midwest, Western and Southern.

AiC provides its services through its branch and field offices, assigned on a geographic basis to one of the five regions.

- Each branch office is staffed with technical personnel and managed by a branch manager, who has primary responsibility for the administration, personnel, recruiting, customer relations and profitability of the branch.

- The branch manager has broad authority to conduct the operations of the branch, subject to adherence to corporate policies.

- In general, field offices are established to support specific projects for one or more specific customers at locations not served by a local branch office and are managed by a branch office when the volume of business and the prospects for additional business justify the additional location expenses associated with branch office status.

Regional offices are in Indianapolis (IN), New York (NY), St. Louis (MO), Atlanta (GA) and San Francisco, (CA).

Branch offices are in Atlanta (GA); Austin, Dallas and Houston (TX); Bellevue (WA); Boca Raton and Tampa (FL); Cincinnati, Cleveland and Columbus (OH); Concord (CA); Denver (CO); Durham/Raleigh (NC); Indianapolis (IN); Iselin (NJ); Kansas City and St. Louis (MO); Lexington (KY); Minneapolis and Rochester (MN); Morrisville (NC); New York City and Rochester (NY); Omaha (NE); Phoenix (AZ); Schaumburg (IL); Southfield (MI) and Tulsa (OK).

AiC has field offices in Akron/Canton (OH), Boston (MA), Boulder (CO), Charlotte (NC), Des Moines (IA), Los Angeles, Sacramento and San Jose (CA), Miami (FL), Philadelphia (PA), Washington, D.C., Toronto (Ontario, Canada), and Cambridge (England).

AiC has formed a new division, AiC TechWest, headquartered in Denver, to manage its U S WEST business.

Financials

Fiscal 1995 revenue reached $218.4 million, a 24% increase over fiscal 1994 revenue of $176.0 million. Net income increased nearly 42%, from $8.0 million in fiscal 1994 to $11.3 million in fiscal 1995.

A five-year financial summary is shown on the following page.

Revenue growth was attributed primarily to increases in billable hours of service rendered to clients as evidenced by increases in technical personnel. Rate increases have not contributed significantly to revenue increases because of prevailing competitive conditions that have made it difficult for the company to increase the hourly rates it charges for its services.

Salaries, contracted services and direct charges, which represent AiC's direct labor costs, have remained constant as a percent of revenues between fiscal 1995 (71.3%), fiscal 1994 (71.2%) and fiscal 1993 (70.5%).

© INPUT 1996. Reproduction prohibited.

Analysts International Corporation
Five-Year Financial Summary
($ Millions, except per share data)

Item	Fiscal Year				
	6/95	6/94	6/93	6/92	6/91
Revenue	$218.4	$176.0	$159.7	$129.6	$116.8
• Percent change from previous year	24%	10%	23%	11%	8%
Income before taxes	$18.5	$12.8	$13.5	$8.7	$9.0
• Percent change from previous year	45%	(5%)	55%	(3%)	(9%)
Net income	$11.3	$8.0	$8.3	$5.4	$5.6
• Percent change from previous year	42%	(4%)	54%	(4%)	(7%)
Earnings per share	$1.55	$1.10	$1.15	$0.76	$0.79
• Percent change from previous year	41%	(4%)	51%	(4%)	(8%)

During fiscal 1995, AiC had revenues of $68,904 per employee, compared with $68,000 per employee in fiscal 1994.

Interim Results

Revenue for the three months ending September 30, 1995 reached $73.1 million, a 51% increase over $48.4 million for the same period in 1994.

- Revenues for this year's period include $13 million of pass-through billings from subcontracts under a new national contract with U S WEST. These pass-through billings have the effect of reducing the company's margins.
- Net income rose 16%, from $2.4 million to more than $2.8 million.

Market Financials

AiC derives its revenue from a range of commercial industry clients; its largest client is IBM.

AiC derived approximately 20% ($43.7 million) of fiscal 1995 revenue, 29% ($51.0 million) of fiscal 1994 revenue and 36% ($57.5 million) of fiscal 1993 revenue from various operating units and divisions of IBM.

A three-year summary of revenue sources by industry served, as provided by AiC, is shown on the following page.

Geographic Markets

Approximately 95% of AiC's revenue is derived from the U.S. and 5% from international sources.

Employees

As of June 30, 1995, AiC employed 3,170 people, of which 82 are sales staff, 78 are recruiting staff and approximately 2,700 are systems analysts, computer programmers and other technical personnel whose services are billable to clients.

As of September 1995, AiC had approximately 3,350 employees.

© INPUT 1996. Reproduction prohibited.

Analysts International Corporation
Three-Year Source of Revenue Summary

	FISCAL YEAR		
INDUSTRY	6/95	6/94	6/93
Electronics	27%	37%	42%
Telecommunications	17%	8%	6%
Services	12%	7%	6%
Manufacturing	11%	10%	12%
Banking and finance	7%	8%	7%
Oil and chemical	6%	6%	5%
Merchandising	4%	4%	4%
Food	4%	4%	4%
Insurance/health care	4%	5%	4%
Power and utility	2%	3%	3%
Transportation	2%	5%	5%
Government	1%	1%	1%
Other	3%	2%	1%
TOTAL	100%	100%	100%

Source: INPUT

Key Products and Services

Virtually 100% of AiC's fiscal 1995 revenue was derived from professional services.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include the following:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including database management systems, compilers and operating systems
- Scientific, specialized control and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development
- Programming, implementation, maintenance, testing and documentation
- Special-purpose systems design and/or modifications, timeshare, process control and medical systems

© INPUT 1996. Reproduction prohibited.

- Systems orientation and training seminars
- Technical audits
- Equipment evaluation and requirements analysis
- Systems resource analysis

In June 1995, AiC entered into a three-year agreement with U S WEST under which AiC will be the principal vendor providing technical personnel to U S WEST's data processing operations.

- At present levels of support, the contract will add approximately $50 million to AiC's annual revenue.
- In addition to the approximately 150 programmers and other technical personnel it had on assignment at U S WEST as of June 30, 1995, AiC also is responsible for managing subcontractors who provide approximately 600 workers.

During fiscal 1995, AiC provided services through 22 of its branch offices to various divisions of IBM.

- As of July 29, 1995, AiC was named one of four primary vendors to IBM in three IBM regions and one of four secondary vendors in IBM's two other regions.
- Hourly rates for services provided to IBM under this arrangement are very competitive and as a result the profit margin from IBM business is expected to be lower. The lower margin may be offset by a higher volume of business.

Examples of AiC projects during fiscal 1995 include the following:

- Providing consulting, programming and technical staff to TransQuest, a joint venture between Delta Air Lines and AT&T GIS that provides information systems and services to the travel and transportation industries
- Providing consulting and conversion support to the Omaha Housing Authority
- Development, implementation and support of custom software for an on-line delivery system at Key Services Corporation
- Enhancing, modifying and supporting legacy software in the financial systems area of 3M
- Design and development of customer software in support of a traffic management system for Maritz Performance Improvement Company

Examples of AiC projects during fiscal 1994 include the following:

- Development of a system for automation of problem resolution of medical-related products to FDA standards
- Design of automated forms and compliance systems
- Development of an investment management system for a banking institution
- Development of a telemarketing and customer contact system

Marketing and Sales

AiC sells its services through its own direct sales force located at its branch offices.

Competitors

National competitors include professional services divisions of large companies such as IBM and Digital. AiC also competes with other national professional services companies such as Andersen Consulting, Computer Task

© INPUT 1996. Reproduction prohibited.

Group, CGA, Keane Inc., Computer Data Systems and Computer Horizons.

AiC branch locations compete with various local professional services firms.

INPUT Assessment

AiC is a strong participant in a large market.

The AiC branch office structure allows the company to react quickly to local market changes and will help provide the flexibility that will be necessary for success in the future. The extensive network of branch and field offices also will provide a safeguard against regional business fluctuations.

A potential problem for AiC is competition from small professional services companies, as the low overhead of these small companies allows them aggressive pricing.

© INPUT 1996. Reproduction prohibited.

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

January 1995

Analysts International Corporation

Chairman & CEO: Frederick W. Lang
President & COO: Victor C. Benda
7615 Metro Boulevard
Minneapolis, MN 55439-3050
Phone: (612) 835-5900
Fax: (612) 897-4555

Status:	Public
Employees:	2,600 (6/94)
Revenue:	$ 175,982,000
Fiscal Year End:	6/30/94

Key Points

- Analysts International Corporation (AiC) has 25 branch and 13 field offices in the U.S.
- AiC served 650 clients on a total of 3,125 projects during fiscal year 1994.
- Revenue growth of 10% during fiscal 1994 was attributed primarily to growth in services provided to the banking and finance, telecommunications and services industries.
- The decrease in net income of nearly 4% was primarily due to the reduction in billing rates at a large client.
- A three-for-two stock split was declared in August 1993.
- AiC also announced the establishment of a field office in Tulsa (OK), increasing its number of field offices to 13 in the U.S.

Company Description

AiC was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. Since its inception, AiC has completed more than 10,000 projects for more than 4,500 clients.

© INPUT 1995. Reproduction prohibited

Operations and Structure

AiC is currently organized into four U.S. geographic regions, each managed by a regional vice president. These regions are Eastern, Central, Midwest and Southern.

AiC provides its services through its branch and field offices, assigned on a geographic basis to one of the four regions.

- Each branch office is staffed with technical personnel and managed by a branch manager, who has primary responsibility for the administration, personnel, recruiting, customer relations and profitability of the branch.
- The branch manager has broad authority to conduct the operations of the branch, subject to adherence to corporate policies.
- In general, field offices are established to support specific projects for one or more specific customers at locations not served by a local branch office and are managed by a branch office when the volume of business and the prospects for additional business justify the additional location expenses associated with branch office status.

Regional and branch offices are in Atlanta (GA); Austin, Dallas and Houston (TX); Bellevue (WA); Boca Raton and Tampa (FL); Cleveland and Columbus (OH); Concord (CA); Denver (CO); Durham/Raleigh (NC); Indianapolis (IN); Kansas City (MO); Lexington (KY); Livingston (NJ); Minneapolis and Rochester (MN); New York City and Rochester (NY); Omaha (NE); Phoenix (AZ); Schaumburg (IL); Southfield (MI); and St. Louis (MO).

AiC has field offices in Akron/Canton (OH), Boston (MA), Boulder (CO), Charlotte (NC), Cincinnati (OH), Des Moines (IA), Miami (FL), Philadelphia (PA), Sacramento and San Jose (CA), Washington, D.C., Toronto (Ontario, Canada), Tulsa (OK) and Cambridge (England).

Financials

Fiscal 1994 revenue reached $176.0 million, a 10% increase over fiscal 1993 revenue of $159.7 million. Net income decreased 4%, from $8.3 million in fiscal 1993 to $8.0 million in fiscal 1994.

A five-year financial summary is shown on the following page.

Revenue growth was primarily attributed to increases in billable hours of service rendered to clients as evidenced by increases in technical personnel. Rate increases have not contributed significantly to revenue increases because of prevailing competitive conditions that have made it difficult for the company to increase the hourly rates it charges for its services.

Salaries, contracted services and direct charges, which represent AiC's direct labor costs, have remained constant as a percent of revenues between fiscal 1994 (71.2%), fiscal 1993 (70.5%) and fiscal 1992 (70.4%).

During fiscal 1994, AiC had revenues of $68,000 per employee compared with $70,000 per employee in fiscal 1993.

Interim Results

Revenue for the three months ending September 30, 1994 reached $48.4 million, a 16% increase over $41.7 million for the same period in 1993. Net income rose 25%, from $1.9 million to more than $2.4 million.

© INPUT 1995 Reproduction prohibited.

Analysts International Corporation
Five-Year Financial Summary
($ Millions, except per share data)

Item	Fiscal Year				
	6/94	6/93	6/92	6/91	6/90
Revenue	$176.0	$159.7	$129.6	$116.8	$107.8
• Percent change from previous year	10%	23%	11%	8%	20%
Income before taxes	$12.8	$13.5	$8.7	$9.0	$9.9
• Percent change from previous year	(5%)	55%	(3%)	(9%)	18%
Net income	$8.0	$8.3	$5.4	$5.6	$6.0
• Percent change from previous year	(4%)	54%	(4%)	(7%)	20%
Earnings per share (a)	$1.10	$1.15	$0.76	$0.79	$0.86
• Percent change from previous year	(4%)	51%	(4%)	(8%)	18%

(a) Adjusted to reflect a 3-for-2 common stock split in the form of a stock dividend distributed September 30, 1993.

Market Financials

AiC derives its revenue from a range of commercial industry clients but the largest client is IBM.

AiC derived approximately 29% ($51.0 million) of fiscal 1994 revenue, 36% ($57.5 million) of fiscal 1993 revenue and 32% ($41 million) of fiscal 1992 revenue from various operating units and divisions of IBM.

A three-year summary of revenue sources by industry served, as provided by AiC, is shown on the following page.

Geographic Markets

Approximately 95% of AiC's revenue is derived from the U.S. and 5% from international sources.

Employees

As of June 30, 1994, AiC employed 2,600 people, of which 75 are sales staff, 45 are recruiting staff and approximately 2,250 are systems analysts, computer programmers and other technical personnel whose services are billable to clients.

As of October 1994, AiC had approximately 2,800 employees.

© INPUT 1995 Reproduction prohibited.

Analysts International Corporation
Three-Year Source of Revenue Summary
($ Millions)

	FISCAL YEAR		
INDUSTRY	6/94	6/93	6/92
Electronics	37%	42%	38%
Manufacturing	10%	12%	15%
Banking and finance	8%	7%	8%
Telecommunications	8%	6%	7%
Services	7%	6%	5%
Oil and chemical	6%	5%	6%
Transportation	5%	5%	3%
Insurance/health care	5%	4%	5%
Food	4%	4%	5%
Merchandising	4%	4%	4%
Power and utility	3%	3%	3%
Government	1%	1%	1%
Other	2%	1%	--
TOTAL	100%	100%	100%

Source: INPUT

Key Products and Services

Virtually 100% of AiC's fiscal 1994 revenue was derived from professional services.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include the following:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including database management systems, compilers and operating systems
- Scientific, specialized control and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development
- Programming, implementation, maintenance, testing and documentation
- Special-purpose systems design and/or modifications, timeshare, process control and medical systems
- Systems orientation and training seminars
- Technical audits
- Equipment evaluation and requirements analysis

© INPUT 1995. Reproduction prohibited.

- Systems resource analysis

Examples of AiC projects during fiscal 1994 include the following:

- Development of a system for automation of problem resolution of medical-related products to FDA standards
- Design of automated forms and compliance systems
- Development of an investment management system for a banking institution
- Development of a telemarketing and customer contact system

Marketing and Sales

AiC sells its services through its own direct sales force located at its branch offices.

Competitors

National competitors include professional services divisions of large companies such as IBM and DEC. AiC also competes with other national professional services companies such as Andersen Consulting, Computer Task Group, CGA, Keane Inc. and Computer Horizons.

AiC branch locations compete with various local professional services firms.

INPUT Assessment

AiC is a strong participant in a large market. INPUT estimates the U.S. Professional Services market to be $23 billion in 1994.

The AiC branch office structure allows the company to react quickly to local market changes and will help provide the flexibility that will be necessary for success in the future. The extensive network of branch and field offices will also provide a safeguard against regional business fluctuations.

A potential problem for AiC is competition from small professional services companies as the low overheads of these small companies make it possible for aggressive pricing. This could result in further erosion of AiC revenue per employee and subsequent profitability.

© INPUT 1995. Reproduction prohibited.

IT2000

INPUT

Company Profile

A Publication from INPUT's Vendor Analysis Program

April 1994

Analysts International Corporation

Chairman & CEO: Frederick W. Lang
President & COO: Victor C. Benda
7615 Metro Boulevard
Minneapolis, MN 55439-3050
Phone: (612) 835-5900
Fax: (612) 897-4555

Status:	Public
Employees:	2,270
Revenue:	$ 159,703,000
Fiscal Year End:	6/30/93

Key Points

- Analysts International Corporation (AiC) increased its number of branch offices to 25 during 1993 by designating its office in Omaha (NE) with branch status.
- In order to continually improve the quality of its professional services, AiC has embarked on a Total Quality Management (TQM) strategy that emphasizes customer satisfaction as a primary goal, shortening the response times for all operations, designing for quality and preventing defects and bringing management and employees together to enhance job performance.
- Revenue growth of 23% was attributed primarily to strong growth in services provided to the electronics, services and transportation industries.
- During fiscal 1993, AiC sold off its financial applications software products for credit collection, loan recovery and collection tracking. The products did not contribute significantly to revenue or profit.

© INPUT 1994 Reproduction prohibited

Company Description

AiC was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. Since its inception, AiC has completed more than 10,000 projects for more than 4,500 clients.

Operations and Structure

AiC is currently organized into five U.S. geographic regions, each managed by a regional vice president. These regions are Eastern, Central, Midwest, Southern and Western.

AiC provides its services through its branch and field offices, assigned on a geographic basis to one of the five regions.

- Each branch office is staffed with technical personnel and managed by a branch manager, who has primary responsibility for the administration, personnel, recruiting, customer relations and profitability of the branch.
- The branch manager has broad authority to conduct the operations of the branch, subject to adherence to corporate policies.
- In general, field offices are established to support specific projects for one or more specific customers at locations not served by a local branch office and are managed by a branch office when the volume of business and the prospects for additional business justify the additional location expenses associated with branch office status.

Regional and branch offices are in Atlanta (GA); Austin, Dallas, and Houston (TX); Bellevue (WA); Boca Raton and Tampa (FL); Cleveland and Columbus (OH); Concord (CA); Denver (CO); Durham/Raleigh (NC); Indianapolis (IN); Kansas City (MO); Lexington (KY); Livingston (NJ); Minneapolis and Rochester (MN); New York City and Rochester (NY); Omaha (NE); Phoenix (AZ); Schaumburg (IL); Southfield (MI); and St. Louis (MO).

AiC has field offices in Akron/Canton (OH), Boston (MA), Boulder (CO), Charlotte (NC), Cincinnati (OH), Des Moines (IA), Miami (FL), Philadelphia (PA), Sacramento and San Jose (CA), Washington, D.C., Toronto (Ontario, Canada) and Cambridge (England).

Financials

Fiscal 1993 revenue reached $159.7 million, a 23% increase over fiscal 1992 revenue of $129.6 million. Net income rose 54%, from $5.4 million in fiscal 1992 to $8.3 million in fiscal 1993. A five-year financial summary follows:

© INPUT 1994. Reproduction prohibited.

Analysts International Corporation
Five-Year Financial Summary
($ Millions, except per share data)

Item	Fiscal Year 6/93	6/92	6/91	6/90	6/89
Revenue	$159.7	$129.6	$116.8	$107.8	$89.9
• Percent change from previous year	23%	11%	8%	20%	28%
Income before taxes	$13.5	$8.7	$9.0	$9.9	$8.4
• Percent change from previous year	55%	(3%)	(9%)	18%	65%
Net income	$8.3	$5.4	$5.6	$6.0	$5.0
• Percent change from previous year	54%	(4%)	(7%)	20%	61%
Earnings per share (a)	$1.15	$0.76	$0.79	$0.86	$0.73
• Percent change from previous year	51%	(4%)	(8%)	18%	58%

(a) Adjusted to reflect a 3-for-2 common stock split in the form of a stock dividend distributed September 30, 1993.

Revenue growth was primarily attributed to increases in billable hours of service rendered to clients as evidenced by increases in technical personnel. Rate increases have not contributed significantly to revenue increases because of prevailing competitive conditions that have made it difficult for the company to increase the hourly rates it charges for its services.

Salaries, contracted services and direct charges, which represent AiC's direct labor costs, have remained constant as a percent of revenues between fiscal 1993 (70.5%), fiscal 1992 (70.4%) and fiscal 1991 (70.6%). AiC has strived to control labor costs, passing on labor cost increases through increased billing rates where possible and maintaining productivity levels of its billable technical staff.

Interim Results: Revenue for the six months ending December 31, 1993 reached $84.6 million, a 10% increase over $77.2 million for the same period in 1992. Net income was nearly $4.0 million, compared to $3.9 million for the same period a year ago.

- During the period AiC added 180 technical personnel to the staff, which should increase revenues in the second half, but billing rate pressures will affect profit growth for the year.
- AiC also announced the establishment of a branch office in Omaha (NE), increasing its number of branch offices to 25.

© INPUT 1994 Reproduction prohibited.

Market Financials

AiC derives its revenue from a range of commercial industry clients. A three-year summary of revenue sources by industry served, as provided by AiC, follows:

Analysts International Corporation
Three-Year Source of Revenue Summary
($ Millions)

	FISCAL YEAR		
INDUSTRY	1993	1992	1991
Electronics	42%	38%	37%
Manufacturing	12%	15%	18%
Banking and finance	7%	8%	6%
Telecommunications	6%	7%	8%
Services	6%	5%	2%
Oil and chemical	5%	6%	2%
Transportation	5%	3%	3%
Insurance/health care	4%	5%	6%
Food	4%	5%	6%
Merchandising	4%	4%	6%
Power and utility	3%	3%	3%
Government	1%	1%	2%
Other	1%	--	1%
TOTAL	100%	100%	100%

AiC derived approximately 36% ($57.5 million) of fiscal 1993 revenue, 32% ($41 million) of fiscal 1992 revenue and 30% ($35 million) of fiscal 1991 revenue from various operating units and divisions of IBM.

Geographic Markets

Approximately 95% of AiC's revenue is derived from the U.S. and 5% from international sources.

Divestitures

During fiscal 1993, AiC sold its financial applications software products in two separate transactions. The products included the Credit Collection Accounting System and the Delinquent Loan Recovery System.

Employees

As of June 30, 1993, AiC employed 2,270 people, of which 60 are sales staff, 39 are recruiting staff and approximately 1,950 are systems analysts, computer programmers and other technical personnel whose services are billable to clients.

Currently, AiC has approximately 2,500 employees.

Key Products and Services

Virtually 100% of AiC's fiscal 1993 revenue was derived from professional services.

© INPUT 1994. Reproduction prohibited.

During fiscal 1993, AiC provided professional services to approximately 605 clients (up from 585 in fiscal 1992), of which approximately 190 were new clients. The company worked on a total of 2,740 different projects during fiscal 1993, up from 2,550 products during fiscal 1992.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include the following:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including database management systems, compilers and operating systems
- Scientific, specialized control and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development
- Programming, implementation, maintenance, testing and documentation
- Special-purpose systems design and/or modifications, timeshare, process control and medical systems
- Systems orientation and training seminars
- Technical audits
- Equipment evaluation and requirements analysis
- Systems resource analysis

Examples of AiC projects during fiscal 1993 include the following:

- The analysis, design and development of software for major enhancements to Cargill Incorporated's accounting system
- Major enhancements and upgrades to Goodyear Tire & Rubber Company's computer-aided design and manufacturing system
- Project management, system-level programming, testing and documentation for Lexmark International, Inc.
- Developing a new MRP-II system to support Thompson Consumer Electronics' television manufacturing locations
- Developing various software, software portability, user manuals and documentation in support of Minute Makers electronic supermarkets
- Providing ongoing support and enhancements to Vulcan Chemicals' OPEC order processing system

© INPUT 1994. Reproduction prohibited.

Examples of AiC projects during fiscal 1992 include the following:

- Designing and developing applications programs for American Electric Power's marketing/accounting/customer service system
- Providing major enhancements to Red Wing Shoe Company's order processing/accounting/manufacturing system.
- Developing and implementing integrated network software for use by Eastman Kodak in its Thermal Media Manufacturing group

Available training seminars include the following:

- AiC's CICS/VS Command Level training for applications programmers is a one-week class/computer workshop conducted at the client's site. Experienced batch programmers are trained to design, code, test, debug and execute on-line programs.
- ProFile, a three-day seminar, presents AiC-developed project control procedures that address common data processing management problems in the areas of planning, control and documentation.
- Advanced CICS/VS training provides additional insight for experienced batch programmers who have attended the CICS/VS Command Level course.

Marketing and Sales

AiC sells its services through its own direct sales force located at its branch offices.

Competitors

National competitors include professional services divisions of large companies such as IBM, Andersen Consulting and DEC and other national software services companies such as Computer Task Group, CGA, Keane (which acquired the AGS division of NYNEX) and Computer Horizons.

AiC branch locations compete with various local professional services firms.

© INPUT 1994 Reproduction prohibited.

ANALYSTS INTERNATIONAL CORPORATION

7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, Chairman and CEO
Victor C. Benda, President and COO
Public Corporation, NASDAQ
Total Employees: 1,750
Total Revenue, Fiscal Year End
6/30/91: $116,788,000

The Company

Analysts International Corporation (AiC) was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. The company also offers three financial application software products. Since its inception, AiC has completed more than 10,000 projects for more than 4,500 clients.

Fiscal 1991 revenue reached $116.8 million, an 8% increase over fiscal 1990 revenue of $107.8 million. Net income declined 7%, from $6.0 million in fiscal 1990 to $5.6 million in fiscal 1991. A five-year financial summary follows:

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ millions, except per share data)

	FISCAL YEAR				
ITEM	6/91	6/90	6/89	6/88	6/87
Revenue	$116.8	$107.8	$89.9	$70.1	$56.7
· Percent increase from previous year	8%	20%	28%	24%	21%
Income before taxes	$9.0	$9.9	$8.4	$5.1	$1.7
· Percent increase (decrease) from previous year	(9%)	18%	64%	199%	279%
Net income	$5.6	$6.0	$5.0	$3.1	$1.4
· Percent increase (decrease) from previous year	(7%)	21%	60%	114%	251%
Earnings per share	$1.19	$1.29	$1.09	$0.69	$0.33
· Percent increase (decrease) from previous year	(8%)	18%	58%	109%	250%

Copyright 1991 by INPUT. Reproduction Prohibited.

AiC management attributes the company's growth during the past two years primarily to a greater volume of business, as evidenced by an increase in technical personnel and to increases in hourly rates billable to clients. Contracts with various units of IBM also have contributed to revenue growth.

- Salaries, contracted services, and direct charges, which represent AiC's direct labor costs, increased as a percent of revenues between fiscal 1991 (70.6%), fiscal 1990 (68.5%), and fiscal 1989 (68.0%). Customer deferrals of projects as a result of concerns about the economy during fiscal 1991 resulted in lower use of billable technical staff and a higher ratio of salaries to revenue generated.

AiC is organized into four U.S. geographic regions, each managed by a regional vice president. Regions are Eastern, Central, Midwest, and Western.

As of June 30, 1991, AiC employed 1,750 people, of which 54 are sales staff, 35 are recruiting staff, and approximately 1,465 are systems analysts, computer programmers, and other technical personnel whose services are billable to clients.

National competitors include professional services divisions of large companies such as IBM, Control Data Corporation, and DEC, and other national software services companies such as Computer Task Group, CGA, the AGS division of NYNEX, Computer Horizons, and Keane. AiC branch locations compete with various local professional services firms.

Key Products and Services

Over 98% ($114 million) of AiC's fiscal 1991 revenue was derived from professional services. The remainder was derived from application software products and hardware sales.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including data base management systems, compilers, and operating systems

Copyright 1991 by INPUT. Reproduction Prohibited.

- Scientific, specialized control, and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development
- Programming, implementation, maintenance, testing, and documentation
- Special-purpose systems design and/or modifications, timeshare, process control, and medical systems
- Systems orientation and training seminars
- Technical audits
- Equipment evaluation and requirements analysis
- Systems resource analysis

Examples of AiC projects during fiscal 1991 include the following:

- AiC designed and developed application programs for General Electric Motors' Production Control System, which links workstations and LAN servers in General Electric Motors' 17 locations worldwide.
- Under subcontract to Price Waterhouse, AiC developed custom applications for the American Legion's new IBM AS/400-based membership information system.
- AiC is working with Northern Telecom and its research subsidiary, BNR, to develop applications for "Product Portfolio", a system designed to shorten the development cycle of Northern Telecom's communications products.

Examples of AiC projects during fiscal 1990 include the following:

- AiC designed and developed application programs to assist Rochester Telephone Corp. in handling special service records.
- AiC has developed control systems software for use by Rockwell Graphic Systems in its automated printing presses. Rockwell has been an AiC client since 1981.

Copyright 1991 by INPUT. Reproduction Prohibited.

- AiC has worked closely with Federal Express' Micro-Systems Development Group on designing and enhancing the SuperTracker System, a hand-held computer used by Federal Express couriers to scan barcodes identifying each package and record the transit of shipments.

- AiC supported Westpac Banking Corporation's Americas Division in the installation of Tandem hardware, operating software, and utilities; developed specific system interfaces to existing Westpac systems; and produced operational documentation.

- AiC consultants have supported 3M's EDI group in the development and installation of a new mapping software package and software to interface with various 3M applications. 3M has been an AiC client since 1967.

During fiscal 1991, AiC provided professional services to approximately 590 clients, of which approximately 135 were new clients. The company worked on a total of 2,100 different projects during fiscal 1991.

AiC, through its branch offices, markets application software products and offers training seminars.

- Software products include the following:

 - The Credit Collection Accounting System (CCAS), originally developed under a professional services contract for a collection agency client, provides data gathering, control, and reporting functions for the collection of retail and commercial credit accounts.

 - CCAS operates on IBM System/36, /38, and AS/400 computers and is available to clients for license as a software product and as a turnkey system.

 - CCAS software ranges in price from $20,000 to $60,000.

 - The Delinquent Loan Recovery System (DLR$), introduced in March 1986, is designed for credit unions, savings and loans, banks, and other financial institutions.

 - Capabilities are similar to those offered with CCAS. DLR$ runs on Data General MV Series minicomputers and IBM PCs. The software ranges in price from $10,000 to $20,000.

Copyright 1991 by INPUT. Reproduction Prohibited.

- The Charge-Off Tracking System (CTS), introduced in January 1989, is targeted to organizations using third-party collection firms to track their collection efforts. CTS runs on Data General MV series minicomputers and IBM PCs. The software ranges in price from $3,000 to $5,000.

· Available training seminars include the following:

- AiC's CICS/VS Command Level training for applications programmers is a one-week class/computer workshop conducted at the client's site. Experienced batch programmers are trained to design, code, test, debug, and execute on-line programs.

- ProFile, a three-day seminary, presents AiC-developed project control procedures that address common data processing management problems in the areas of planning, control, and documentation.

- Advanced CICS/VS training provides additional insight for experienced batch programmers who have attended the CICS/VS Command Level course.

Industry Markets

AiC derives its revenue from a range of commercial industry clients. A three-year summary of revenue sources by industry served, as provided by AiC, follows:

Copyright 1991 by INPUT. Reproduction Prohibited.

ANALYSTS INTERNATIONAL CORPORATION
THREE-YEAR SOURCE OF REVENUE SUMMARY

	FISCAL YEAR		
INDUSTRY	6/91	6/90	6/89
Electronics	37%	34%	31%
Manufacturing	18%	15%	19%
Telecommunications	8%	9%	13%
Banking and finance	6%	10%	8%
Merchandising	6%	4%	4%
Insurance/health care	6%	7%	5%
Food	6%	5%	4%
Transportation	3%	5%	4%
Power and utility	3%	2%	1%
Oil and chemical	2%	4%	5%
Services	2%	--	--
Government	2%	2%	1%
Other	1%	3%	5%
TOTAL	100%	100%	100%

AiC derived approximately 30% ($35 million) of fiscal 1991 revenue, 25% ($27 million) of fiscal 1990 revenue, and 22% ($19.8 million) of fiscal 1989 revenue from various operating units and divisions of IBM.

Geographic Markets

One hundred percent of AiC's revenue is derived from the U.S.

Regional and branch offices are in Atlanta (GA); Austin, Dallas, and Houston (TX); Bellevue (WA); Boca Raton and Tampa (FL); Cleveland and Columbus (OH); Concord (CA); Denver (CO); Durham (NC); Indianapolis (IN); Kansas City (MO); Livingston (NJ); Minneapolis and Rochester (MN); New York City and Rochester (NY); Phoenix (AZ); Schaumburg (IL); Southfield (MI); and St. Louis (MO).

AiC also has field offices in Akron/Canton (OH), Albany (NY), Boulder (CO), Lexington (KY), Memphis (TN), Omaha (NE), Philadelphia (PA), and San Jose (CA).

Computer Hardware

AiC has Data General and IBM computers installed at its corporate offices.

Copyright 1991 by INPUT. Reproduction Prohibited.

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, Chairman and CEO
Victor C. Benda, President and COO
Public Corporation, NASDAQ
Total Employees: 1,498
Total Revenue, Fiscal Year End
6/30/89: $89,852,000

The Company

Analysts International Corporation (AiC) was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. The company also offers three financial application software products.

Fiscal 1989 revenue reached $89.9 million, a 28% increase over fiscal 1988 revenue of $70.1 million. Net income rose 60%, from $3.1 million in fiscal 1988 to nearly $5 million in fiscal 1989. A five-year financial summary follows:

Copyright 1990 by INPUT. Reproduction Prohibited.

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

	FISCAL YEAR				
ITEM	6/89	6/88	6/87	6/86	6/85
Revenue	$89,852	$70,083	$56,701	$46,732	$44,291
• Percent increase from previous year	28%	24%	21%	6%	44%
Income (loss) before taxes	$8,404	$5,113	$1,710	$(954)	$1,039
• Percent increase (decrease) from previous year	64%	199%	279%	(192%)	167%
Net income (loss)	$4,954	$3,088	$1,440	$(954)	$929
• Percent increase (decrease) from previous year	60%	114%	251%	(203%)	187%
Earnings (loss) per share (a)	$1.09	$0.69	$0.33	$(0.22)	$0.22
• Percent increase (decrease) from previous year	58%	109%	250%	(200%)	181%

(a) Restated to reflect a 5-for-4 common stock split in the form of a 25% stock dividend paid August 14, 1989.

AiC management attributes the company's growth during the past two years primarily to a greater volume of business, as evidenced by a 30% increase in technical personnel from fiscal 1988 to fiscal 1989, and to increases in hourly rates billable to clients. Contracts with various units of IBM also have contributed to revenue growth.

Revenue for the three months ending September 30, 1989 was $24.7 million, a 22% increase over $20.2 million for the same period in 1988. Net income for the period rose 23%, from $1.1 million to over $1.3 million.

AiC is organized into four geographic regions, each managed by a regional vice president. Regions include Eastern, Central, Midwest, and Western.

As of June 30, 1989, AiC employed 1,498 persons, of which 49 are sales staff, 29 are recruiting staff, and approximately 1,250 are systems analysts, computer programmers, and other technical personnel whose services are billable to clients. The company

Copyright 1990 by INPUT. Reproduction Prohibited.

currently has over 1,550 employees.

National competitors include professional services divisions of large companies such as IBM, Control Data Corporation, and DEC, and other national software services companies such as Computer Task Group, CGA, and the AGS division of NYNEX. AiC branch locations compete with various local professional services firms.

Key Products and Services

Over 98% ($88 million) of AiC's fiscal 1989 revenue was derived from professional services. The remainder of revenue was derived from application software product and hardware sales.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including data base management systems, compilers, and operating systems
- Scientific, specialized control, and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development
- Programming, implementation, maintenance, testing, and documentation
- Special purpose systems design and/or modifications, timeshare, process control, and medical systems
- Systems orientation and training seminars
- Technical audits

Copyright 1990 by INPUT. Reproduction Prohibited.

- Equipment evaluation and requirements analysis
- Systems resource analysis

Examples of types of projects AiC was involved in during fiscal 1989 include the following:

- AiC participated in the design and development of testing programs for use by Motorola in its development and manufacture of analog integrated circuits. In addition to this project, AiC has carried out work for Motorola in connection with over 40 projects since 1980.
- AiC participated in the design and development of applications programs for MasterCard International's Banknet communications system. AiC has worked on more than 40 individual projects for MasterCard since 1977 and has provided ongoing support to Banknet and related projects, including MAPP (MasterCard Automated Point-of-Sale Program).
- AiC designed and developed the Quota Compensation System for Eastman Kodak's Clinical Products Division to assist in the monitoring and managing of its sales activities. AiC continues to be involved with ongoing enhancements to the Quota Compensation System. During 1989, AiC assisted in upgrading and installing the system from an IBM System/38 to an AS/400. AiC has worked with Kodak for seven years, and during that time has participated in about 150 separate projects for various Kodak units.

Examples of types of projects AiC has worked on in previous years include the following:

- The design and development of applications programs to assist Burlington Northern Railroad in managing its scheduling and usage of rail cars
- The creation of data structures and related programming for chemical analysis for Rohm and Haas Co.
- The development of applications programs to support a ticket ordering system for the New Jersey Transit Corporation
- The design and development of applications programs to assist an electric generating utility in managing its fuel resources
- Maintenance and enhancement of applications programs supporting a health maintenance organization's (HMO's) health

Copyright 1990 by INPUT. Reproduction Prohibited.

claims processing

- Maintenance and enhancement of application programs to perform sales, history, and analysis for a food processing company

- The design and development of assembler language programs used in microprocessor-based control units for computer manufacturers

During fiscal 1989, AiC provided professional services to approximately 520 clients, of which approximately 220 were new clients. The company worked on a total of 1,914 different projects during fiscal 1989.

AiC, through its branch offices, markets application software products and offers training seminars.

- Software products include the following:

 - The Credit Collection Accounting System (CCAS), originally developed under a professional services contract for a collection agency client, provides data gathering, control, and reporting functions for the collection of retail and commercial credit accounts.

 - CCAS operates on IBM System 36, 38, and AS/400 computers and is available to clients for license as a software product and as a turnkey system.

 - CCAS software ranges in price from $20,000 to $60,000.

 - The Delinquent Loan Recovery System (DLR$), introduced in March 1986, is designed for credit unions, savings and loans, banks, and other financial institutions.

 - Capabilities are similar to those offered with CCAS. DLR$ runs on Data General MV Series minicomputers and IBM PCs. The software ranges in price from $10,000 to $20,000.

 - The Charge-Off Tracking System (CTS), introduced in January 1989, is targeted to organizations using third-party collection firms to track their collection efforts. CTS runs on Data General MV series minicomputers and IBM PCs. The software ranges in price from $3,000 to $5,000.

- Available training seminars include the following:

Copyright 1990 by INPUT. Reproduction Prohibited.

- AiC's CICS/VS Command Level training for applications programmers is a one-week class/computer workshop conducted at the client's site. Experienced batch programmers are trained to design, code, test, debug, and execute on-line programs.

- ProFile, a three-day seminary, presents AiC-developed project control procedures that address common data processing management problems in the areas of planning, control, and documentation.

- Advanced CICS/VS training provides additional insight for experienced batch programmers who have attended the CICS/VS Command Level course.

Industry Markets

AiC derives its revenue from a range of commercial industry clients. A three-year summary of revenue sources by industry served, as provided by AiC, follows:

ANALYSTS INTERNATIONAL CORPORATION
THREE-YEAR SOURCE OF REVENUE SUMMARY

	FISCAL YEAR		
INDUSTRY	6/89	6/88	6/87
Electronics	31%	30%	17%
Manufacturing	19%	25%	28%
Telecommunications	13%	13%	18%
Banking	8%	9%	12%
Insurance/Health Care	5%	6%	7%
Oil and Chemical	5%	--	--
Food	4%	5%	7%
Merchandising	4%	5%	3%
Power and Utility	1%	2%	7%
Transportation	4%	2%	--
Government	1%	1%	1%
Other	5%	2%	--
TOTAL	**100%**	**100%**	**100%**

AiC derived approximately 22% ($19.8 million) of fiscal 1989 revenue, 25% ($17.5 million) of fiscal 1988 revenue, and 18% ($10.2 million) of fiscal 1987 revenue from various operating units and divisions of IBM.

Copyright 1990 by INPUT. Reproduction Prohibited.

Geographic Markets

One hundred percent of AiC's revenue is derived from the U.S.

Regional and branch offices are located in Atlanta (GA), Columbus and Independence (OH), Concord and Los Angeles (CA), Denver (CO), Fairport (NY), Fort Washington (PA), Houston and Irving (TX), Indianapolis (IN), Kansas City (MO), Livingston (NJ), Minneapolis (MN), New York (NY), Phoenix (AZ), Rochester (MN), Rochester (NY), Schaumburg (IL), Southfield (MI), and St. Louis (MO).

AiC also has field offices in Austin (TX), Boca Raton and Tampa (FL), Boulder (CO), Louisville (KY), Memphis (TN), Omaha (NE), Philadelphia (PA), Raleigh and Durham (NC), San Jose (CA), Seattle (WA), and Tulsa (OK).

Computer Hardware

AiC has Data General and IBM computers installed at its corporate offices.

Copyright 1990 by INPUT. Reproduction Prohibited.

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President
Public Corporation
Total Employees: 1,170
Total Revenue, Fiscal Year End
6/30/88: $70,083,000

The Company

Analysts International Corporation (AiC) was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. The company also offers two financial application software products.

Fiscal 1988 revenue reached $70.1 million, a 24% increase over fiscal 1987 revenue of $56.7 million. Net income rose 114%, from $1.4 million in fiscal 1987 to $3.1 million in fiscal 1988. A five-year financial summary follows:

Copyright 1988 by INPUT. Reproduction Prohibited.

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

	FISCAL YEAR				
ITEM	6/88	6/87	6/86	6/85	6/84
Revenue	$70,083	$56,701	$46,732	$44,291	$30,687
• Percent increase from previous year	24%	21%	6%	44%	29%
Income (loss) before taxes	$5,113	$1,710	$(954)	$1,039	$(1,555)
• Percent increase (decrease) from previous year	199%	279%	(192%)	167%	(57%)
Net income (loss)	$3,088	$1,440	$(954)	$929	$(1,062)
• Percent increase (decrease) from previous year	114%	251%	(203%)	187%	(173%)
Earnings (loss) per share (a)	$0.86	$0.41	$(0.28)	$0.27	$(0.34)
• Percent increase (decrease) from previous year	110%	246%	(204%)	179%	(143%)

(a) Restated to reflect a 5-for-4 common stock split in the form of a 25% stock dividend paid July 20, 1987.

AiC management attributes the company's growth primarily to a greater volume of business, as evidenced by a 20% increase in technical personnel from fiscal 1987 to fiscal 1988, and to increases in hourly rates billable to clients.

In September 1986, AiC substantially reduced activities related to the development and marketing of its CORVET application generator product after determining that direct sales of the product were not sufficient to support expenses.

- CORVET-related costs for the first quarter of fiscal 1987 include a nonrecurring charge of $506,000 related primarily to the write-off of development equipment and staff separation costs associated with the reduction in CORVET-related activity.

- Effective August 20, 1987, AiC terminated all CORVET-related activities except for limited efforts to bring the project to an orderly conclusion.

Copyright 1988 by INPUT. Reproduction Prohibited.

Revenue for the three months ending September 30, 1988 was $20.2 million, a 25% increase over $16.1 million for the same period in 1987. Net income for the period rose 54%, from $703,000 to nearly $1.1 million.

AiC is organized into four geographic regions, each managed by a regional vice president. Regions include Eastern, Central, Midwest, and Western.

As of June 30, 1988, AiC employed 1,170 persons. The company currently has 1,300 employees.

National competitors include professional services divisions of large companies such as IBM, Control Data Corporation, and DEC, and other national software services companies such as Computer Task Group, CGA, and the AGS division of NYNEX. AiC branch locations compete with various local professional services firms.

Key Products and Services

Over 98% ($69 million) of AiC's fiscal 1988 revenue was derived from professional services. The remainder of revenue was derived from application software product and hardware sales.

AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include:

- Banking and insurance
- Manufacturing and inventory control
- Business and accounting
- Systems software, including data base management systems, compilers, and operating systems
- Scientific, specialized control, and related applications
- Communications systems for the private sector

Professional services are provided in the following functional areas:

- Generation of functional and detailed design specifications
- Systems software design and development

Copyright 1988 by INPUT. Reproduction Prohibited.

- Programming, implementation, maintenance, testing, and documentation
- Special purpose systems design and/or modifications, timeshare, process control, and medical systems
- Systems orientation and training seminars
- Technical audits
- Equipment evaluation and requirements analysis
- Systems resource analysis

Examples of types of projects AiC was involved in during fiscal 1988 include the following:

- The design and development of applications programs to assist Burlington Northern Railroad in managing its scheduling and usage of rail cars
- The creation of data structures and related programming for chemical analysis for Rohm and Haas Co.
- The development of applications programs to support a ticket ordering system for the New Jersey Transit Corporation

Examples of types of projects AiC was involved in during fiscal 1987 include the following:

- The design and development of applications programs to assist an electric generating utility in managing its fuel resources
- Maintenance and enhancement of applications programs supporting a Health Maintenance Organization's (HMO's) health claims processing
- Maintenance and enhancement of application programs to perform sales, history, and analysis for a food processing company
- The design and development of assembler language programs used in microprocessor-based control units for computer manufacturers

During fiscal 1988 AiC provided professional services to approximately 175 new clients and as of June 30, 1988 was

Copyright 1988 by INPUT. Reproduction Prohibited.

engaged in approximately 650 customer projects. This compares to approximately 450 projects for 413 customers as of June 30, 1987.

AiC, through its branch offices, markets application software products and offers training seminars.

- Software products include the following:
 - The Credit Collection Accounting System (CCAS), originally developed under a professional services contract for a collection agency client, provides data gathering, control, and reporting functions for the collection of retail credit accounts.
 - CCAS operates on IBM System 34, 36, and 38 minicomputers running under SSP and is available to clients for license as a software product and as a turnkey system.
 - CCAS software ranges in price from $20,000 to $45,000.
 - The Delinquent Loan Recovery System (DLR$), introduced in March 1986, is designed for credit unions, savings and loans, banks, and other financial institutions.
 - Capabilities are similar to those offered with CCAS. DLR$ runs on Data General MV Series minicomputers and is priced at $30,000.
- Available training seminars include the following:
 - AiC's CICS/VS Command Level training for applications programmers is a one-week class/computer workshop conducted at the client's site. Experienced batch programmers are trained to design, code, test, debug, and execute on-line programs.
 - ProFile, a three-day seminary, presents AiC-developed project control procedures that address common data processing management problems in the areas of planning, control, and documentation.
 - Advanced CICS/VS training provides additional insight for experienced batch programmers who have attended the CICS/VS Command Level course.

Copyright 1988 by INPUT. Reproduction Prohibited.

Industry Markets

AiC derives its revenue from a range of commercial industry clients. A two-year summary of source of revenue, as provided by AiC, by industry served follows:

ANALYSTS INTERNATIONAL CORPORATION
TWO-YEAR SOURCE OF REVENUE SUMMARY

	FISCAL YEAR	
INDUSTRY	6/88	6/87
Electronics	30%	17%
Manufacturing	25%	28%
Telecommunications	13%	18%
Banking	9%	12%
Insurance/Health Care	6%	7%
Food	5%	7%
Merchandising	5%	3%
Power and Utility	2%	7%
Transportation	2%	--
Government	1%	1%
Other	2%	--
TOTAL	**100%**	**100%**

AiC derived approximately 25% ($17.5 million) of fiscal 1988 revenue and 18% ($10.2 million) of fiscal 1987 revenue from various operating units and divisions of IBM.

Geographic Markets

One hundred percent of AiC's revenue is derived from the U.S.

Regional and branch offices are located in Columbus (OH), Concord (CA), Englewood (CO), Fairport (NY), Fort Washington (PA), Houston (TX), Independence (OH), Indianapolis (IN), Irving (TX), Kansas City (MO), Livingston (NJ), Minneapolis (MN), New York (NY), Phoenix (AZ), Rochester (MN), Rochester (NY), Schaumburg (IL), Southfield (MI), St. Louis (MO), and Willow Grove (PA).

AiC also has field offices in Atlanta (GA), Louisville (KY), Memphis (TN), Omaha (NE), San Jose (CA), Seattle (WA), and Tulsa (OK).

Computer Hardware

AiC has Data General and IBM computers installed at its corporate offices.

Copyright 1988 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President
Public Corporation, OTC
Total Employees: 830
Total Revenue, Fiscal Year End 6/30/86: $46,732,000

THE COMPANY

- Analysts International Corporation (AiC) was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. AiC also provides the CORVET® application generator and two financial application software products. The company is a value added remarketer for IBM minicomputers.

- Fiscal 1986 revenue reached $46.7 million, a 6% increase over fiscal 1985 revenue of $44.3 million. Net losses were $954,000, compared to net income of $929,000 in fiscal 1985. A five-year financial summary follows:

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	6/86	6/85	6/84	6/83	6/82
Revenue	$ 46,732	$ 44,291	$ 30,687	$ 23,780	$ 27,659
. Percent increase (decrease) from previous year	6%	44%	29%	(14%)	16%
Income (loss) before taxes	$ (954)	$ 1,039	$ (1,555)	$ (991)	$ 1,587
. Percent increase (decrease) from previous year	(192%)	167%	(57%)	(162%)	105%
Net income (loss)	$ (954)	$ 929	$ (1,062)	$ (389)	$ 857)
. Percent increase (decrease) from previous year	(203%)	187%	(173)	(145%)	102%
Earnings (loss) per share	$ (0.35)	$ 0.34	$ (0.42)	$ (0.17)	$ 0.38
. Percent increase (decrease) from previous year	(203%)	181%	(147%)	(145%)	73%

©1986 by INPUT. Reproduction Prohibited.

- AiC management states that the company's earnings have been adversely affected in three of the last four years by development and marketing costs associated with its CORVET application generator. Those costs have been expensed rather than capitalized.

 - CORVET-related costs were approximately $2.5 million during fiscal 1986. During the third and fourth quarters AiC initiated marketing plans for the Data General and IBM versions of CORVET. No sales of the product were completed in the fiscal year, although the units were being tested by potential buyers.

 - In September 1986 AiC announced significant reductions in its $2.5 million budget for CORVET. On an annualized basis these cost reductions will be approximately $2 million and will affect about 20 employees.

 - AiC plans to continue the use of the product for internally developed custom software for clients and will continue to offer the product for sale, but will no longer allocate significant resources for development or marketing.

 - The company is also exploring alternative product distribution methods, as well as the sale of the technology.

- Revenue for the three months ending September 30, 1986 was $12 million, a 2% increase over $11.8 million for the same period in 1985. Net losses were $890,000, compared to net income of $102,000 for the same period a year ago. The net losses for the quarter include a $506,000 charge for the write-off of development equipment and staff separation costs associated with the CORVET product as well as $603,000 in sales and development costs.

- AiC is organized into four geographic regions, each managed by a regional vice president. Regions include Northwest, Midwest, Central, and Eastern.

- As of June 30, 1986, AiC employed 830 persons. The company currently has 897 employees, segmented as follows:

Marketing/sales	35
Customer support	97
Programmers/analysts	718
General and administrative	47
	897

- National competitors include professional services divisions of large companies such as Control Data Corporation and IBM. AiC branch locations compete with various local and national professional services firms.

©1986 by INPUT. Reproduction Prohibited.

KEY PRODUCTS AND SERVICES

- Approximately 98% ($46 million) of fiscal 1986 revenue was derived from professional services. Software product and hardware sales represented 2% ($739,000) of total revenue ($258,000 from CORVET and $481,000 from application software and hardware).

- AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include:

 - Banking and insurance.
 - Manufacturing and inventory control.
 - Business and accounting.
 - Systems software, including data base management systems, compilers, and operating systems.
 - Scientific, specialized control, and related applications.
 - Communications systems for the private sector.

- Professional services are provided in the following functional areas:

 - Generation of functional and detailed design specifications.
 - Systems software design and development.
 - Programming, implementation, maintenance, testing, and documentation.
 - Special purpose systems design and/or modifications, timeshare, process control, medical systems, etc.
 - Systems orientation and training seminars.
 - Technical audits.
 - Equipment evaluation and requirements analysis.
 - Systems resource analysis.

- As of June 30, 1986, AiC was engaged in approximately 500 projects for 450 customers.

©1986 by INPUT. Reproduction Prohibited.

- Recent contract examples include the following:
 - On November 6, 1986, AiC announced it had been awarded a multi-year contract to provide professional services to a Fortune 100 company. The contract could contribute an average of $5 million per year to AiC revenue over the next two calendar years. No further details were disclosed.
 - During fiscal 1985 AiC was awarded a contract to design and develop a billing information system for a major electronic communications company.
- AiC, through its branch offices, markets software products and offers training seminars.
 - Software products include the following:
 - CORVET is an application generator software product that runs on Data General MV Series hardware. The software generates business applications in COBOL for IBM and Data General environments. CORVET has been accepted into Data General's Independent Software Vendor program.
 - The Credit Collection Accounting System (CCAS), originally developed under a professional service contract for a collection agency client, provides data gathering, control, and reporting functions for the collection of retail credit accounts.
 - CCAS operates on IBM System 34, 36, and 38 minicomputers running under SSP and is available to clients for license as a software product and as a turnkey system.
 - CCAS software ranges in price from $20,000 to $45,000. There are currently 20 installations.
 - The Delinquent Loan Recovery System (DLRS), introduced in March 1986, is designed for credit unions, savings and loans, banks, and other financial institutions.
 - Capabilities are similar to those offered with CCAS.
 - DLRS runs on Data General MV Series minicomputers and is priced at $30,000.
 - There are currently four DLRS installations.

©1986 by INPUT. Reproduction Prohibited.

- Available training seminars include the following:

 - AiC's CICS/VS Command Level training for applications programmers is a one-week class/computer workshop conducted at the client's site. Experienced batch programmers are trained to design, code, test, debug, and successfully execute on-line programs.

 - ProFile, a three-day seminar, presents AiC-developed project control procedures that address common data processing management problems in the areas of planning, control, and documentation.

 - Advanced CICS/VS training provides additional insight for experienced batch programmers who have attended the CICS/VS Command Level course.

INDUSTRY MARKETS

- AiC derived its revenue from a range of industries. Primary industries served include manufacturing, banking and finance, insurance, and communications.

GEOGRAPHIC MARKETS

- One hundred percent of AiC's fiscal 1986 revenue was derived from the U.S.

- Regional and branch offices are located in Bellevue (WA), Cleveland and Valley View (OH), Englewood (CO), New York City (NY), Fort Washington (PA), Indianapolis (IN), Irving (TX), Livingston (NJ), San Mateo and Studio City (CA), Schaumburg (IL), Southfield (MI), and St. Louis (MO).

- AiC also has field offices located in Akron, Atlanta, Boston, Columbia, Houston, Kansas City, Louisville, Memphis, Omaha, Stamford, and Tulsa.

COMPUTER HARDWARE AND SOFTWARE

- AiC has Data General and IBM computers installed at its corporate offices.

©1986 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO PROFILE DATED MARCH 1983*

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President
Public Corporation, OTC
Total Employees: 807
Total Revenue, Fiscal Year End 6/30/85: $44,291,000

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM / FISCAL YEAR	6/85	6/84	6/83	6/82	6/81
Revenue	$44,291	$30,687	$23,780	$27,659	$23,775
. Percent increase (decrease) from previous year	44%	29%	(14%)	16%	20%
Income (loss) before taxes	$ 1,039	$ (1,555)	$ (991)	$ 1,587	$ 775
. Percent increase (decrease) from previous year	167%	(57%)	(162%)	105%	43%
Net income (loss)	$ 929	$ (1,062)	$ (389)	$ 857	$ 425
. Percent increase (decrease) from previous year	187%	(173%)	(145%)	102%	22%
Earnings (loss) per share (a)	$ 0.34	$ (0.42)	$ (0.17)	$ 0.38	$ 0.22
. Percent increase (decrease) from previous year	181%	(147%)	(145%)	73%	5%

(a) Restated to reflect a five-for-four stock split paid July 5, 1983, and a three-for-two stock split paid August 16, 1983.

- AiC management attributes improved financial results for fiscal 1985 to increased revenue through sales force expansion and expansion of the technical staff, and to decreased expenses through cost containments in marketing and administration areas and decreased research and development costs due to the completion of the development phase of AiC's CORVET software package.

*Replaces Financial Update of January 1984

©1985 by INPUT. Reproduction Prohibited.

- CORVET® is an application generator software product that runs on Data General MV Series hardware. The software generates business applications in COBOL for IBM and Data General environments. CORVET has been accepted into Data General's Independent Software Vendor program.

- AiC realized $112,000 in CORVET-related revenue in fiscal 1985, the first revenue generated from the product following delays that kept CORVET from commercial distribution in 1984.

SOURCE OF REVENUE

- Approximately 95% of fiscal 1985 revenue was derived from professional services. Software product sales and training seminars contributed the remaining 5%. Professional services revenue was derived from contract programming, systems design and analysis, and consulting services.

©1985 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO HIGHLIGHT DATED MARCH 1983

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President
Public Corporation, OTC
Total Employees: 491
Total Revenue, Fiscal Year End 6/30/83: $23,780,000

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	6/83	6/82	6/81	6/80	6/79
Revenue	$23,780	$27,659	$23,775	$19,880	$12,189
. Percent increase (decrease) from previous year	(14%)	16%	20%	63%	83%
Income (loss) before taxes	$ (991)	$ 1,587	$ 775	$ 543	$ 839
. Percent increase (decrease) from previous year	(162%)	105%	43%	(35%)	14%
Net income (loss)	$ (389)	$ 857	$ 425	$ 348	$ 487
. Percent increase (decrease) from previous year	(145%)	102%	22%	(29%)	26%
Earnings (loss) per share (a)	$ (0.17)	$ 0.38	$ 0.22	$ 0.21	$ 0.29
. Percent increase (decrease) from previous year	(145%)	73%	5%	(28%)	N/A

(a) Restated to reflect a five-for-four stock split paid July 5, 1983, and a three-for-two stock split paid August 16, 1983.

© 1984 by INPUT. Reproduction Prohibited.

SOURCE OF REVENUE

- Approximately 97% of fiscal 1983 revenue was derived from professional services. Software product sales and seminars represented 3% of total revenue. Professional services revenue was segmented as follows:

Contract programming	50%
Systems design and development	35
Consulting services	15
	100%

© 1984 by INPUT. Reproduction Prohibited.

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President
Public Corporation, OTC
Total Employees: 557
Total Revenue, Fiscal Year End 6/30/82: $27,659,000

THE COMPANY

- Analysts International Corporation (AiC) was formed in 1966 as a publicly held corporation to provide professional services to a wide variety of industries. In 1979 AiC also began offering software packages.

- Fiscal 1982 revenue reached $27.7 million, a 16% increase over 1981 revenue of $23.8 million. Net income rose 102% to $857,000 in 1982 from $425,000 in 1981. A five-year financial summary follows:

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	6/82	6/81	6/80	6/79	6/78
Revenue	$ 27,659	$ 23,775	$ 19,880	$ 12,189	$ 6,678
. Percent increase from previous year	16%	20%	63%	83%	40%
Income before taxes	$ 1,587	$ 775	$ 543	$ 839	$ 737
. Percent increase (decrease) from previous year	105%	43%	(35%)	14%	24%
Net income	$ 857	$ 425	$ 348	$ 487	$ 387
. Percent increase (decrease) from previous year	102%	22%	(29%)	26%	29%
Earnings per share	$ 0.71	$ 0.41	$ 0.40	$ 0.55	$ 0.44
. Percent increase (decrease) from previous year	73%	3%	(27%)	25%	26%

- Fiscal 1982 sales increases came primarily from professional services, which accounted for $26.9 million of revenue. The company's clientele remains

©1983 by INPUT. Reproduction Prohibited.

broad-based and includes small businesses as well as large multinational clients.

- AiC attributes the 102% increase in fiscal 1982 net income primarily to the implementation of strict cost controls.

- In early fiscal 1982 the company initiated a special research and development project to develop software packages and devoted approximately $319,000 (1% of revenue) to this effort. There were no research and development expenses in fiscal 1980 and 1981.

- Interest expenses decreased to $33,000 in fiscal 1982 from $209,000 in 1981 and $256,000 in 1980.

 - These decreases were due to the proceeds of approximately $2.5 million from the public issue of 330,000 shares of common stock in February 1981, which were used to retire outstanding bank borrowings.

- Revenue for the six months ending December 31, 1982 decreased 13% to approximately $12 million from $13.7 million for the same period in 1981. Net losses were $42,000 as compared to net earnings of $550,000 in 1981.

 - Management believes these results were due to an increase in R&D costs and decreased sales resulting from the continuing recession.

 - Software product development and associated costs will continue to increase in the second half of fiscal 1983. The company plans to announce its first proprietary software product before June 1983.

- AiC is organized into six geographic regions, each managed by a regional vice president, and one division.

 - Regions include Northwest, Southwest, Midwest, Central, Eastern, and Southeast.

 - The Computer Products Division, headquartered in Minneapolis, is responsible for marketing software products and providing training seminars. The division had also marketed a series of industry specific turnkey systems to manufacturing and distribution clients. That business was discontinued in mid-1981 because of prohibitive costs involved in competing in this specialized market.

- As of June 30, 1982, AiC employed 557 persons. The company currently has 550 employees, segmented as follows:

Marketing/sales	30
Customer support	10
Programmers/analysts	468
General and administrative	42
	550

©1983 by INPUT. Reproduction Prohibited.

- During fiscal 1982 AiC implemented the use of full-time branch sales personnel and nearly doubled the size of its sales force.

- National competitors include professional services divisions of large companies such as Control Data Corporation, IBM, and Sperry-Univac. AiC branch locations compete with various local professional services firms.

KEY PRODUCTS AND SERVICES

- Approximately 97% of fiscal 1982 revenue was derived from professional services. Software product sales and seminars represented 3% of total revenue. Professional services revenue was segmented as follows:

Contract programming	40%
Systems design and development	35
Consulting services	25
	100%

- AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include:

 - Banking and insurance.
 - Manufacturing and inventory control.
 - Business and accounting.
 - Systems software, including data base management systems, compilers, and operating systems.
 - Scientific, specialized control, and related applications.
 - Communications systems for the private sector.

- Professional services are provided in the following functional areas:

 - Generation of functional and detailed design specifications.
 - Systems software design and development.
 - Programming, implementation, maintenance, testing, and documentation.
 - Special purpose systems design and/or modifications, timeshare, process control, medical systems, etc.
 - Systems orientation and training seminars.

©1983 by INPUT. Reproduction Prohibited.

- Technical audits.
- Equipment evaluation and requirements analysis.
- Systems resource analysis.

- AiC, through its Computer Products Division (CPD), markets software products and offers training seminars.
 - Software products include:
 - CDIS/3000 (Computer Data Information System), introduced in 1981, a fully integrated financial accounting system for the HP 3000. There are currently 12 installations of the product. Modules range in price from $12,500 to $15,000 and include:
 - Payroll/labor distribution.
 - General ledger.
 - Financial reporting.
 - Accounts payable.
 - Accounts receivable.
 - Project costs.
 - Order entry.
 - Inventory control.
 - Purchasing.
 - Sales analysis.
 - CCAS (Credit Collection Accounting System), an on-line credit package with five installations, runs on the IBM System/34 and is priced at $20,000 including installation and training.
 - Available training seminars include the following:
 - AiC's CICS/VS Command Level training for applications programmers is a one-week class/computer workshop conducted at the client's site. Experienced batch programmers are trained to design, code, test, debug, and successfully execute on-line programs.
 - ProFile, a three-day seminar, presents AiC-developed project control procedures that address common data processing management problems in the areas of planning, control, and documentation.
- AiC currently is developing a proprietary software product with plans for introduction in June 1983.

©1983 by INPUT. Reproduction Prohibited.

INDUSTRY MARKETS

- AiC fiscal 1982 revenue was derived approximately as follows:

Manufacturing	20%
Transportation	10
Utilities	3
Banking and finance	15
Insurance	15
Education	3
Distribution	10
State and local government	1
Other services	23
	100%

GEOGRAPHIC MARKETS

- One hundred percent of AiC's fiscal 1982 revenue was derived from the U.S.
- Branch and field offices are located in Akron, Atlanta, Chicago, Cleveland, Dallas, Denver, Detroit, Duluth, Houston, Indianapolis, Kansas City, Los Angeles, Louisville, Memphis, Minneapolis, New York City, Orange County (CA), Philadelphia, Rochester (NY), St. Louis, San Francisco, Seattle, Spokane, Stamford, Syracuse, and Tulsa.

COMPUTER HARDWARE AND SOFTWARE

- AiC has a Data General ECLIPSE installed at its corporate offices.

©1983 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President
Public Corporation, OTC
Total Staff: 550
Total Revenues, Fiscal Year End
6/30/80: $20,050,000

THE COMPANY

- Analysts International Corporation (AiC) was formed in 1966 as a publicly held Minnesota corporation. The executive management includes Frederick W. Lang, President, and Victor C. Benda, Senior Vice President. Providing professional services has been AiC's primary business since its formation. Marketing turnkey systems and software products are recent additions to AiC's services.

- AiC has experienced a compounded annual growth rate of 45% in revenues over the last five years. Revenues in FY 1980 reached $20 million, an increase of 63% over 1979's $12.3 million. Net earnings, however, were $348,000 in FY 1980, a decrease of 29% from 1979's $487,000. Management stated that the decrease was a result of startup costs associated with expansion. A five-year financial summary follows:

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

AiC
FIVE-YEAR FINANCIAL SUMMARY
($ Thousands, Except Per Share Data)
(FYE 6/30)

ITEM \ FISCAL YEAR	1980	1979	1978	1977	1976
Revenues	$20,050	$12,296	$6,805	$ 4,906	$ 3,883
. Percent increase from previous year	63%	81%	39%	26%	11%
Income before taxes	$ 543	$ 839	$ 737	$ 595	$ 488
. Percent increase from previous year	(35%)	14%	24%	22%	21%
Net income	$ 348	$ 487	$ 387	$ 300	$ 248
. Percent increase from previous year	(29%)	26%	29%	21%	39%
Earnings per share	$ 0.40	$ 0.55	$0.44	$ 0.35	$ 0.29
. Percent increase from previous year	(27%)	25%	26%	21%	38%
Dividends per share	$ 0.30	$ 0.30	$0.25	$ 0.21	$ 0.18

- AiC is geographically organized into six regions, each managed by a regional vice president: Northwest, Southwest, Midwest, Central, Eastern and Northeast.

 - In mid-1979, AiC formed the Computer Products Division to market turnkey systems with applications for the manufacturing and distribution industries, in addition to general financial applications. Although the new division devoted most of its time to planning and organizing during its first year of operation, it still managed to generate approximately 5% of total revenues in FY 1980.

 . AiC will be targeting its turnkey systems to companies whose revenues are greater than $15 million.

- AiC has a staff of 550, segmented as follows:

Marketing/sales	30
Customer support	10
Programmers/analysts	468
General/administrative	42
	550

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

KEY PRODUCTS AND SERVICES

- Professional services generated approximately 95% of total revenues in FY 1980. Turnkey systems and software products represented 5% of total revenues. Professional services revenues were segmented as follows:

Contract programming	35%
Systems design and development	35
Consulting services	30
	100%

- AiC has extensive experience in designing and implementing systems on a variety of large- and small-scale computer systems. Areas of specialization include applications development for:
 - Banking and insurance.
 - Manufacturing and inventory control.
 - Business and accounting.
 - Systems software, including data base management systems, compilers and operating systems.
 - Scientific, specialized control and related applications.
 - Communications and defense systems for federal government agencies.
- Professional services are provided in the following functional areas:
 - Generation of functional and detailed design specifications.
 - Systems software design and development.
 - Programming implementation, maintenance, testing and documentation.
 - Special purpose systems design and/or modifications, timeshare, process control, medical systems, etc.
 - Turnkey systems development.
 - Systems orientation and training seminars.
 - Technical audits.
 - Equipment evaluation and requirements analysis.
 - Systems resource analysis.

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

- AiC through its Computer Products Division (CPD) markets turnkey systems and standard software products to specific industries. Current emphasis is being placed on the manufacturing and distribution areas with the following products:

 - A Manufacturing Information and Accounting System (MIAS) designed for general use by the manufacturing and distribution industries. This on-line, interactive system is available on Data General ECLIPSE or NOVA hardware using either RDOS or AOS operating systems.

 - General Business Management Systems (GBMS), for small- to medium-sized businesses, includes accounts receivable, accounts payable, payroll, fixed asset accounting, word processing and records management. These systems are designed for general business, homebuilder, construction and distribution firms. The systems operate on WANG Laboratories VP and MVP minicomputers.

 - Manufacturing Control System (MCS) is a totally integrated, MRP-based manufacturing system. The system handles most aspects of the manufacturing process and operates on the WANG VS minicomputer.

 - Mini Computer Business Applications (MCBA) include several general financial packages and operate on a variety of minicomputers.

 - A word processing system, MULTIWORD, is available for use on an HP 3000 system using the MPE operating system.

INDUSTRY MARKET

- Industry revenues for FY 1980 were derived approximately as follows:

-	Manufacturing		25%
	. Discrete	20%	
	. Process	5%	
-	Transportation		5%
-	Utilities		10%
-	Banking and finance		15%
	. Commercial banks	10%	
	. Thrift	5%	
-	Insurance		10%
-	Education		5%
-	Distribution		10%
	. Retail	5%	
	. Wholesale	5%	
-	State and local government		5%
-	Other services		15%
			100%

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

GEOGRAPHIC MARKETS

- All of AiC's revenues are derived from the U.S.
- Branch and field offices are located in:

Atlanta	Indianapolis	Seattle
Binghamton (NY)	Kansas City	Spokane
Birmingham	Los Angeles	Duluth
Chicago	Milwaukee	Green Bay
Cleveland	Minneapolis	Madison
Dallas	New York City	Memphis
Denver	Philadelphia	Orange County (CA)
Detroit	Portland	Rochester (MN)
Houston	St. Louis	Salt Lake City
Huntsville (AL)	San Francisco	Tulsa

COMPUTER HARDWARE

- AiC has a Data General ECLIPSE installed at its corporate offices.
- There are various remote terminals at branch offices.

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

FINANCIAL UPDATE TO PROFILE DATED DECEMBER 1986

ANALYSTS INTERNATIONAL CORPORATION
7615 Metro Boulevard
Minneapolis, MN 55435
(612) 835-2330

Frederick W. Lang, President and CEO
Public Corporation, OTC
Total Employees: 971
Total Revenue, Fiscal Year End 6/30/87: $56,701,000

ANALYSTS INTERNATIONAL CORPORATION
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	6/87	6/86	6/85	6/84	6/83
Revenue	$ 56,701	$ 46,732	$ 44,291	$ 30,687	$ 23,780
. Percent increase (decrease) from previous year	21%	6%	44%	29%	(14%)
Income (loss) before taxes	$ 1,710	$ (954)	$ 1,039	$ (1,555)	$ (991)
. Percent increase (decrease) from previous year	279%	(192%)	167%	(57%)	(162%)
Net income (loss)	$ 1,440	$ (954)	$ 929	$ (1,062)	$ (389)
. Percent increase (decrease) from previous year	251%	(203%)	187%	(173%)	(145%)
Earnings (loss) per share (a)	$ 0.41	$ (0.28)	$ 0.27	$ (0.34)	$ (0.14)
. Percent increase (decrease) from previous year	246%	(204%)	179%	(143%)	(147%)

(a) Restated to reflect a 5-for-4 stock split effective July 20, 1987.

- Analysts International Corporation (AiC) management attributes fiscal 1987 revenue growth primarily to a major multi-year contract with a Fortune 100 company, which was awarded in November 1986.
 - Revenue generated by this contract accounted for approximately one-half of the revenue increase.

©1987 by INPUT. Reproduction Prohibited.

- In August 1987, AiC announced it would terminate the CORVET project and all CORVET-related activity except for limited efforts necessary to bring the project to an orderly conclusion. CORVET is an application generator software product that was introduced in 1986.

SOURCE OF REVENUE

- INPUT estimates approximately 95% of AiC's fiscal 1987 revenue was derived from professional services and the remaining 5% was from its software products and hardware sales.

- A summary of AiC's source of revenue for fiscal 1987 by industry segment follows:

Manufacturing	28%
Telecommunications	18
Electronics	17
Banking	12
Utilities	7
Food	7
Insurance/Healthcare	7
Retail	3
Government	1
	100%

- As of June 30, 1987, AiC was engaged in approximately 450 projects for 413 clients.

- Over 50% of AiC's fiscal 1987 revenue was derived from Fortune 500 companies.

©1987 by INPUT. Reproduction Prohibited.

ANALYTICAL TECHNOLOGIES, INC. (ANATEC[R])
30300 Telegraph Road
Suite 200
Birmingham, MI 48010
(313) 540-4440

Al Schornberg, President and CEO
Private Corporation
Total Employees: 165 (6/89)
Total Revenue, Fiscal Year End
12/31/88: $8,200,000

The Company

Analytical Technologies, Inc. (ANATEC[R]), was incorporated in 1980 to provide consulting and programming services to the MIS departments of Fortune 500 corporations and government agencies.

ANATEC was recognized by *INC.* Magazine as one of America's 500 fastest growing privately held companies.

Total 1988 revenue reached $8.2 million, an 11% increase over 1987 revenue of $7.4 million. A five-year revenue summary follows:

ANALYTICAL TECHNOLOGIES, INC.
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR				
ITEM	12/88	12/87	12/86	12/85	12/84
Revenue	$8.2	$7.4	$5.3	$4.4	$4.4
• Percent increase (decrease) from previous year	11%	40%	31%	--	88%

Revenue for the five months ending May 31, 1989 was approximately $3.8 million, a 9% increase over $3.5 million for the same period in 1988.

ANATEC has three divisions, headquartered in Birmingham:

- The Government Services Division provides professional services to the federal government.

Copyright 1989 by INPUT. Reproduction Prohibited.

- The Manufacturing/Engineering Division (M/E) specializes in the manufacturing industry.
- The Relational Database Services Division provides relational data base, consulting, and software development services to various businesses.

Major competitors by markets served include the following:

- Government agencies: Computer Sciences Corporation (CDC) and Electronic Data Systems (EDS).
- Manufacturing and other private sectors: Computer Task Group and the major accounting firms.

Key Products and Services

Approximately 40% of ANATEC's 1988 revenue was derived from systems integration, 31% from software development, 10% from custom turnkey systems, and 19% from consulting/education.

ANATEC provides professional services to approximately twenty Fortune 500 clients. ANATEC's current engagements are broken down into 40% project management, 40% time and materials, and 20% fixed price. A partial list of ANATEC's hardware, software, and language capabilities is shown in Exhibit A. ANATEC's professional services include:

- Application programming and development
- Artificial intelligence systems
- Capacity planning
- Contract programming
- Data administration
- Data integrity management
- Decision support systems
- Documentation
- Education and training
- Engineering services
- Facilities management
- Feasibility studies
- Information resource management planning
- Information needs analysis
- Information engineering
- Management consulting
- Manufacturing systems
- Management information systems
- Micro, mini, and mainframe systems

Copyright 1989 by INPUT. Reproduction Prohibited.

EXHIBIT A

ANALYTICAL TECHNOLOGIES, INC.
PROFESSIONAL SERVICES CAPABILITIES

Hardware
- Honeywell
- Harris
- Sperry
- IBM PC
- Data General
- Novell LANs
- IBM 308X, 303X
- IBM 43XX
- IBM Series 1
- IBM 370
- UNIVAC
- HP 1000
- Tandem
- Burroughs
- Amdahl
- DEC PDP
- DEC VAX
- HP 3000
- Sun
- Apollo

Operating Systems
- GCOS 8
- GCOS 6
- UNIX
- MS DOS
- RSX
- PC DOS
- MVS/XA
- TOPS-10
- TOPS-20
- DOS/VX
- RT-11
- RSTS
- VMS
- AOS/VS
- VM/CMS
- EDX
- OS
- VS
- CP/M
- MVS

Languages/Software
- FOCUS
- INGRES
- DB2
- MARK IV, V
- ALC
- CICS/MACRO
- APL, APL *PLUS
- TAL
- ICCF
- DYNAM/T/D
- VSAM
- Graphics
- ALGOL
- EXEC
- EASYTRIEVE
- COM-PLETE
- SYBASE
- DBASE III+
- FORTRAN
- ORACLE
- IMS/DB/DC
- DATA DICTIONARY
- DATATRIEVE
- BASIC
- ADRS
- DECNET
- LIBRARIAN
- Spreadsheets
- COBOL
- PREDICT
- UFO
- RPG
- BAL
- POWERHOUSE
- ADABASE/NATURAL
- PL/1
- DL/1
- CICS/COMMAND
- ADL
- PANVALET
- FPS
- SNA
- DMS
- C
- TSO
- ASSEMBLER

Copyright 1989 by INPUT. Reproduction Prohibited.

- Project management
- Security and security systems
- Systems software development
- Systems tuning
- Systems integration

ANATEC provides custom software for a variety of industry applications. Exhibit B is a brief overview of those applications:

EXHIBIT B

ANALYTICAL TECHNOLOGIES, INC.
INDUSTRY/APPLICATION CAPABILITIES AND EXPERIENCE

Manufacturing
- Robotics
- Process Control
- Inventory Control
- Order Processing
- Production Control
- Bill of Material
- Integrated Purch/Expedit/Rec'ng
- Parts Control
- Material Handling
- Sales Analysis
- Manufacturing Control Production
- Cost Accounting
- Service Parts Scheduling

Software
- Data Communications
- File Conversions
- Program Development Aids
- Test Data Generators
- Database Management
- Hardware Analysis
- Feasibility Studies
- Systems Programming

Financial
- Payroll
- General Ledger
- Accounts Payable
- Accounts Receivable
- Mortgage
- Direct Deposit
- Automatic Teller
- Trading

Hospital
- On-line Admissions
- Physician and Clinic Billing
- Shared Medical System
- Insurance Log Reporting

Government
- Electromagnetic Research
- Force Accounting
- Circuit Court
- District Court
- Case Information and Control
- Central Pay and Leave
- Regulatory Information Management
- Finance and Accounting
- Real Estate
- Library Map Tracking
- Reprographics

Oil and Gas
- Gas Well Accounting
- Gas Contracts
- Gas Tax Planning
- Lease Support System
- Crude Oil Accounting

Insurance
- Insurance Consolidation System
- Insurance Reporting
- Claim System
- On-line Membership
- Home-Owners/Boat Owners
- Membership and Billing

Merchandising
- Distributed Processing
- Sales System
- Shop Scheduling and Reporting
- Inventory
- Advertising Accounting
- Point of Sale

Copyright 1989 by INPUT. Reproduction Prohibited.

Professional services contracts include:

- Developing a system map of applications, programs, and data on the Novell s-Net LAN for the Resource Management Officer, Corps of Engineers. ANATEC developed programming specifications for data input, data protection upon certification, printing of paper checks, and verification of the commercial accounts payment operations on this same system. Procedures and programs for interfacing this operation with the Honeywell DPS8 mainframe system called COEMIS FA were also developed.

- System development and maintenance support for the Engineering Financial Systems of a major automotive manufacturer, involving conversion of existing COBOL systems to FOCUS. ANATEC consultants are providing all project management and technical support, including staffing, status reporting, and end user training to deliver the functional systems.

- Developing the Hermosillo Material Control system for a stamping and assembly plant in Hermosillo, Mexico. Applications include bill of material, parts file, preventive maintenance, customer data, metals records, parts history, contract tracking, and financial.

- Developing a mechanical sketch system which mechanically generates usage condition codes and assigns file control numbers to driveline, coupling shaft, and support bracket parts that have been selected by a drafting design run.

- Customizing a personnel software package (IDS) to meet the needs of the client. Applications include Hourly Payroll, Salary, Retirement, and Pension.

- Developing cost tracking system for long term BC/BS-covered patients. ANATEC provided the general design and wrote the programs for each of the three departments involved with the system (Discharge Planning, Case Management, and BC/BS accounts using case management). ANATEC also provided a user manual and initial user training.

Industry Markets

Approximately 50% of ANATEC's 1988 revenue was derived from the automotive industry, 15% from the federal government, 13% from insurance and healthcare, 10% from petrochemical, and 10% from food and beverage, financial, and other manufacturing industries.

Copyright 1989 by INPUT. Reproduction Prohibited.

Clients include Ford Motor Company, Continental Bank, Burlington Northern, Chrysler Corporation, 3M Company, U.S. Army Corps of Engineers, and Blue Cross/Blue Shield of Michigan.

ANATEC has strategic partnerships with Sybase and Relational Technologies, Inc. ANATEC is providing consulting services for product development.

Geographic Markets

Approximately 97% of ANATEC's 1988 revenue was derived from the U.S and the remaining 3% was from England.

ANATEC is headquartered in Birmingham (MI), and has branch offices in Omaha (NE), Clearwater (FL), and St. Paul (MN).

ANATEC has field service personnel located in Dallas (TX), North Haven (CT), Milwaukee (WI), and Atlanta (GA).

Computer Hardware and Software

The company currently has one DEC MicroVAX II operating under VMS installed at its headquarters in Birmingham. INGRES and SYBASE are currently supported.

Copyright 1989 by INPUT. Reproduction Prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program

June 1998

Andersen Consulting – Outsourcing Services

Contact Information for U.S. Outsourcing Services:
Carmen San Miguel
1345 Avenue of the Americas
New York, New York 10105
Phone: 212/708-3502
Fax: 212/445-9915
Internet: www.ac.com



The following profile outlines the services and support offered by Andersen Consulting for Outsourcing Services.

General Background Information

Andersen Consulting, a partnership, is a global management and technology consulting organization.

Main activities

Exhibit 1

Andersen Consulting's Revenues

	1997
World-wide revenues (if relevant)	$6.6 B
of which outsourcing services revenues	$1B
US revenues	$3.75 B
of which outsourcing services revenues	$677M

© 1998 by INPUT. Reproduction prohibited.

Exhibit 2

Employee numbers

	Total	Outsourcing Personnel
World-wide	53,426	Approx. 12,000
US	28,730	Approx. 5,300

Source: Andersen Consulting

Exhibit 3

Number of Outsourcing Contracts

	Total
World-wide	Approx. 230
US	Approx. 105

Source: Andersen Consulting

Service Offerings

Andersen Consulting started it's outsourcing practice in 1989 with a mainframe processing and applications management contracts from Manville, Saloman Brothers and Dial Corporation.

Exhibit 4

Outsourcing Services Competencies

Service Type	Involvement	Brief Description of Service
Information Technology Outsourcing	Low	Managing and updating the entire IT process including applications, data centers and networks in a mainframe or client/server environment
Applications Management	High	Development, maintenance and update of clients applications
Design, Build, Run	High	Full end-to-end service for the creation, delivery and operation of enterprise-wide applications. This combines strategy, design and applications development with day-to-day management of desktop, network and operations
Business Process Outsourcing	High	The management of an entire business process, such as finance and administration, logistics and customer care.

Source: Andersen Consulting

© 1998 by INPUT. Reproduction prohibited.

Vertical Market Competencies

Exhibit 5 shows all of Andersen Consulting's vertical market activities.

Exhibit 5

Activities by Vertical Market

Vertical Market	Sub-segment	% of Revenues	Growth Rate
Financial Services		29%	28%
	Financial Markets		
	Retail Financial Services		
	Insurance		
Products		50%	27%
	Consumer		
	Industrial		
	Process/Energy		
Communications		14%	37%
Utilities		7%	31%
Government		7%	7%

Source: Andersen Consulting

© 1998 by INPUT. Reproduction prohibited.

Exhibit 6

Outsourcing Reference Customers

Customer	Service Provided	Contract Details
DuPont	Applications Management	
Ryder Systems	Information Technology Outsourcing and Business Process Outsourcing	Business Process Outsourcing of Ryder Systems logistics.
Telecom Argentina	Applications Management and Design, Build, Run	
Credit Lyonnais	Information Technology Outsourcing and Business Process Outsourcing	Management of financial and back office applications including securities, investment planning draft, portfolio, account reconciliation, credit & debit cards
CoreStates Financial Corporation	Business Process Outsourcing, IT Outsourcing	3 aspects: BPM for application development and maintenance, alliance formed to develop strategic technological applications, Y2K management
Prudential Assurance	Information Technology Outsourcing	
Ticona	Design, Build, Run	Andersen will combine its consulting and BPM expertise to upgrade and maintain Ticona's SAP systems using their "Design, Build, and Run" life-cycle approach. The customer's objectives include improved service levels, flexibility and cost predictability.
Celanese	Design, Build, Run	Vendor responsible for implementation of Design Build and Run methodology using SAP R/3 Systems. Vendor will also have control of all application management processes.

Source: INPUT

Strategic Positioning

Andersen Consulting consider their main strengths in the outsourcing market to be:

- Industry Expertise
- Partnering Philosophy
- Ability to help clients effect complex change and improve business performance by integrating our expertise in strategy, technology, business process and change management
- Access to global knowledge and resources
- Application development and management

© 1998 by INPUT. Reproduction prohibited.

- Strategic alliance building with both clients and other vendors
- Expertise in business process transformation and management

Competition

Andersen Consulting consider their most important competitors in the outsourcing market to be:

- EDS
- IBM
- CSC

Objectives

Andersen expects that their Business Process Management is likely to represent at least 40% of their revenues by the year 2000. To achieve this, it will expand its global business. The company will grow and develop their BPO and Design, Build, Run offerings through profitable representation of an array of companies through several different vertical markets and geographic regions.

© 1998 by INPUT. Reproduction prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program

May 1998

Andersen Consulting- Baan Services Providers

Contact Information for Baan Services in North America
Manager - Baan Group/Enterprise Business Solutions Practice: **Brian Smith**
Andersen Consulting
600 West Fulton Street, 5th Floor
Chicago, IL 60661
USA
Phone: **312-507-5308**
Fax: **312-931-2650**
Internet: **www.ac.com**

The following profile outlines the services and support offered by Andersen Consulting for Baan Services.

Company Background

Founded in 1989, Andersen Consulting, a private partnership, provides a range of consulting and outsourcing services through a combination of its four competencies:

- Strategic Services
- Change Management
- Process
- Technology

Andersen Consulting currently serves its clients globally through 148 locations in 47 countries, including 72 in the Americas, 57 in Europe/Middle East/Africa/India (EMEAI) and 19 locations in the Asia Pacific region.

© 1998 by INPUT. Reproduction Prohibited

Worldwide revenues for Andersen Consulting were $4.2 billion in 1995, $5.3 in 1996 and $6.6 in 1997. North American revenues for the corresponding years were $2.3, $2.9 and $3.7 billion.

Baan Activities

Andersen Consulting, a leading global full service management and technology consulting organization, established their Enterprise Business Solutions practice in 1994 and entered the Baan market in 1996. Andersen Consulting has built a comprehensive Baan business group that is focused on delivering high-value solutions to its clients. This group is supported by dedicated Andersen Consulting professionals with Baan-specific skills; enterprise resource planning (ERP) professionals with functional and technical skills; methodologies and tools; a strong alliance relationship with Baan; and a global network of Solution Centers—dedicated facilities which leverage Andersen Consulting skills in ERP software. The result is a total solution dedicated to delivering value to clients implementing Baan and helping clients maximize their Baan investment.

Based on experience with clients, Andersen Consulting has found that key success factors for a Baan implementation include:

- A realistic business case based on a business process reengineering approach
- Skillful program management and change management
- Deep industry business process skills
- Technology and client/server skills
- Baan-experienced resources
- Baan-specific tools, methodology and solutions.

Andersen Consulting recognizes that clients implement Baan according to their unique needs. For some, bringing Baan into an organization may affect only one process area. For others, it can mean enterprise-wide, transformational change. By working with clients to align their business elements—strategy, people, processes, and technologies—Andersen Consulting helps clients achieve business integration, the optimal working environment in which business elements work in tandem to achieve best business performance.

Employees

Worldwide, Andersen Consulting has more than 53,000 employees, of which 175 are dedicated to their Baan practice. Since Andersen deploys its resources on a global basis, regional staffing figures are not provided. Exhibit 1 identifies four staff categories under which Andersen classifies its Baan consulting resources. The figures represent the corresponding percentage of total Baan resources.

© 1998 by INPUT. Reproduction Prohibited

Exhibit 1

Andersen Consulting Baan Staffing

Type of Staff	Percentage
Partners	5%
Managers	40%
Consultants	35%
Analysts	20%

Source: Andersen Consulting

Implementation Approaches

Andersen Consulting's Baan solution delivery model allows flexible planning and delivery services which provides high-quality solutions quickly, predictably and more effectively. Their services model manifests tangible benefits for their clients. Their approach is based on a combination of assets, tools, methodology, and deep expertise applied throughout the project life cycle.

Andersen Consulting has built a comprehensive solution delivery infrastructure which focuses on delivering value to its clients. The core of their solution delivery infrastructure is the Andersen Consulting Enterprise Business Solutions global network of Enterprise Solution Centers. These Solution Centers are positioned as key delivery agents and are the place where knowledge capital accumulates. They offer:

- Deep Baan skills, both technical and functional, and wide industry experience
- Benefits of delivering a solution which is more reliable, predictable, with high quality, faster delivery and reduced cost and risk
- Jump-start capabilities for rapid implementation
- An ability to leverage assets in human performance tools, industry templates and best practices, enterprise architectures and solutions.

Andersen Consulting's Solution Centers not only use knowledge capital and resources to deliver Baan solutions more quickly, but also continually leverage assets–through reuse—to lower costs. Reusability is the key to delivering high-quality solutions quickly, predictably and more efficiently. Andersen Consulting is also committed to improving productivity by using repeatable, measurable processes. As an example, a Solution Center can readily customize an existing enterprise architecture, saving a significant amount of the total implementation time. Andersen Consulting experienced personnel perform gap/analysis/fit assessments in a fraction of the time otherwise spent on such work.

Andersen Consulting also has made significant investments in tools and methodologies used throughout the project life cycle to achieve quality, rapid system implementations. A key component of Andersen Consulting's tools and methodology is Method/Target.

© 1998 by INPUT. Reproduction Prohibited

Andersen Consulting developed Method/Target to assist in the planning and delivery of Baan engagements while maintaining a focus on the client business objectives to be achieved.

Andersen Consulting worked closely with Baan to combine the best components of Baan's Target Methodology and Andersen Consulting's Business Integration Methodology. The resulting methodology outlines a proven approach to serve as a guide to implementing Baan while offering project teams the flexibility to customize the approach for a client's specific needs. The approach and associated content provides a project team with Andersen Consulting "best practices" specific to Baan implementations and business integration.

Key Benefits of Andersen Consulting's Methodology:

- Leverages Andersen Consulting's Baan implementation experience
- Uses Baan specific tools and templates for resource planning, scheduling, budgeting and deliverables
- Helps guide the project team through the entire context of the implementation
- Supports a range of project sizes, complexities and roll-out strategies with its flexible rapid implementation approach
- Confirms that the technology infrastructure and environments are in place for a quality implementation
- Provides knowledge transfer to clients, thus ensuring client ownership and understanding throughout the project.

Ongoing Support Offerings

Andersen Consulting's solution delivery model is designed to deliver value to their clients throughout the entire life cycle of a solution. With their Global Enterprise Solution Center network and their Business Process Management practice, Andersen Consulting offers a wide variety of services to support the ongoing maintenance and operation of their clients' Baan application investments.

One such offering is *Design, Build, Run®. Design, Build, Run* is an advanced delivery framework for Baan and other system intensive environments. Its purpose is to help insure the delivery of business value that systems like Baan are intended to provide. Andersen Consulting may become involved in the entire process, from designing to sustaining the entire solution. This life cycle approach is supported by a clear business case that is consistent with Andersen Consulting's clients' business strategy. The business case drives all aspects of the solution — through design, application development, maintenance, change and training management, to day-to-day operations. Believing that any enterprise solution should be a sustainable asset for Andersen Consulting's clients' business, *Design, Build, Run* helps their clients seek affordability, mitigate risk and predict the solution's useful life.

© 1998 by INPUT. Reproduction Prohibited

Pricing Approaches

With Andersen Consulting's flexible service model, they customize the pricing structure based on the project and client's preferences. Some clients prefer traditional fixed rate fees; others prefer an innovative "gain sharing" arrangement. In either case, Andersen Consulting is willing to share the risk and rewards of the solution with the client.

For ongoing Baan support, Andersen Consulting clients may use Andersen's *Design, Build, Run* option, in which their clients may choose a "solution license"—a financial arrangement that allows their clients to average payments for third party software and hardware, services and long term maintenance operations over much longer periods. This type of arrangement enables Andersen Consulting to mitigate their client's risk by delaying much of the development cost until the production system is in service and generating business benefits.

In addition to eliminating up-front payments, a solution license:

- Frees working capital for other business purposes
- Increases the predictability of information technology costs
- Rapidly realizes the business benefits from a Baan installation.

Alliances and Partnerships

Andersen Consulting's alliance program maintains a portfolio of global, geographic, and industry relationships with solution and technology providers. These alliances contribute to much closer and more productive working relationships with key vendors, enabling improved client responsiveness and improving the speed and quality of their solution delivery approach. Andersen Consulting global alliances include agreements with third party vendors and hardware vendors (such as Hewlett- Packard, Sun, Compaq, and Digital; database vendors such as Oracle, Informix, and IBM).

Vertical Market Competencies

Andersen Consulting's Baan market focus mirrors Baan's vertical market and geographic focus.

Andersen's split of their Baan business by vertical market is noted in Exhibit 2.

Exhibit 2

Vertical Market Expertise

Vertical Market	Percentage
Automotive	35%
Industrial Equipment	20%
Electronics	10%
Other	35%

Source: Andersen Consulting

© 1998 by INPUT. Reproduction Prohibited

Exhibit 3 details Andersen's participation in seven broad market categories, in terms of the level of consulting or implementation involvement (e.g., consulting with the client, who will then perform the implementation, or implementing the Baan system for the client).

Strategic Positioning

Andersen considers its main differentiators and strengths in the Baan market to be:

Exhibit 3

Level of Vertical Market Involvement, by Activity

Vertical Market	Consulting	Implementation
Aerospace & Defense	High	Medium
Automotive	High	High
Process Industries	High	Medium
Hybrid	High	Medium
Project Industries	High	Medium
Electronics	High	Medium
General Manufacturing	High	High

Source: Andersen Consulting

Business Value Delivery

One of Andersen Consulting's key strengths is that they encourage the use of measurable success factors in establishing their business arrangements. With appropriate and active client participation, Andersen Consulting is willing to link their compensation to its client's benefits realization. The development of a solid value proposition encourages up front thinking on how success is defined and measured, which is key to achieving mutual success. In the business systems integration marketplace, they have pioneered the use of these "value-based arrangements" for their Enterprise Business Systems implementations and other engagements.

Global Capabilities

Andersen Consulting recognizes that their clients need an implementation partner with global capabilities. Their top priority is delivering the same level of high-quality client service regardless of the client's location. They bring to each engagement, regardless of country or continent, the full spectrum of skills and experiences of their over 53,000 professionals.

Extensive Knowledge Capital and Knowledge Transfer

Andersen Consulting emphasizes global sharing of knowledge and "best practices" via its Knowledge Xchange knowledge management system. The Knowledge Xchange is a portfolio of applications and communications facilities that help to distribute, retrieve and foster knowledge of both internal and external information. By providing client project teams with open access to selected high-value added portions of their extensive knowledge base, their Knowledge Network serves as the foundation for developing and sharing knowledge capital with their clients.

© 1998 by INPUT. Reproduction Prohibited

Beyond the Knowledge Xchange is Andersen Consulting's Client Knowledge Network. Available to client project teams, the Client Knowledge Network is accessible through the Internet and provides implementation project teams—facing similar challenges in comparable business environments—with a means to easily communicate and share knowledge assets. It can also serve as the primary repository for all project deliverables.

Strong Industry Program

Andersen Consulting goes to market via its global industry practices, applying in-depth industry knowledge and experience to make the application of their services relevant to their client's needs.

Plans for the Future

Andersen Consulting is investing heavily in growing its Baan capabilities. It is leveraging an array of ERP knowledge capital, industry expertise, Solution Centers, solution delivery offerings, tools, methodology and resources across all of its Enterprise Business Solutions practice. Andersen Consulting is a global organization. They focus on delivering a high quality of service to their clients–regardless of where the client or Andersen Consulting staff are located.

Selected Customer Projects

The following five client profiles demonstrate Andersen Consulting's Baan implementations in both the United States and other parts of the world.

© 1998 by INPUT. Reproduction Prohibited

Exhibit 4

Andersen Consulting References

Baan Customer	Industry (Vertical Market or Subsegment)	Project Details
Automotive OEM	Discrete	This European Automotive OEM wanted to develop, produce and market a radically different new car using radically new processes, changing the rules of the automotive industry. They have teamed with Andersen Consulting to help them deliver the IT infrastructure and business processes needed for this innovative company. Some of the key processes implemented include: A pull system of replenishment from dealers was implemented instead of the typical push replenishment, which limited product shortages and overstocks. A manufacturing system based on inventory-less manufacturing concepts resulting in a very large savings in inventory costs. Quality Control activities were reduced due to implementing single-supplier/sourcing concepts. Andersen Consulting installed Baan to support plant operations for this client.
Tier 1 Automotive Supplier	Discrete	Andersen Consulting is assisting a Tier 1 automotive supplier in the United States in a Baan implementation covering manufacturing, distribution and financials processes. The client has used Andersen Consulting's jump-start capabilities in one of its North American Solution Centers in order to get the client's environment for assessment, planning and design phases up and running quickly.
Construction Equipment Manufacturer	Discrete	In the construction equipment industry, the speed of supplying parts is crucial to customers, because machine breakdowns immediately result in customers having to cease their operations. Andersen Consulting is assisting this client in implementing a new global parts network system based on Baan. This system enables subsidiaries to inquire stock availability at other locations to provide parts to the customers with minimum delivery lead-time; delivering exceptional customer service and efficient inventory management to the client.
Truck Manufacturer	Discrete	Andersen Consulting is assisting this European Truck Manufacturer with a multi-site implementation of Baan. Andersen Consulting's Enterprise Solution Center in The Netherlands is being used to develop key product enhancements for the client. Baan practice staff have delivered product training to the client and are helping it prepare for upgrading some sites to Baan Series (formerly known as BAAN V).
Mining Equipment Manufacturer	Discrete	Manufacturing huge mining equipment is a complex business. Andersen Consulting is helping this U.S. manufacturer implement Baan in a big way. The implementation covers the full suite of business processes supported by BAAN IV.

Source: Andersen Consulting

© 1998 by INPUT. Reproduction Prohibited

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program

March 1998

Andersen Consulting

Managing Partner: George T. Shaheen
100 South Wacker Drive
Chicago, IL 60606*
Phone: (312) 372-7100
Fax: (312) 507-8970
Internet: http://www.ac.com

*Analyst relations group

Status	Partnership
Total Consultants:	44,548
Total Personnel:	53,426
Revenue:	$6,647,000,000
Calendar Year End:	12/31/97

Key Points

- Andersen Consulting uses its business integration approach—aligning a client's technology, people, and business processes with its strategy—to achieve best business performance.
- Andersen Consulting attributes the company's success to delivering value to its clients through its people and global reservoir of knowledge.
- Andersen Consulting has organized the operations of its 16 global industry practices into five "Global Market Units" created to deliver consistent standards of quality and added value worldwide.

© INPUT 1998. Reproduction prohibited

- Effective December 17, 1997, Andersen Consulting filed a request with the International Chamber of Commerce to intervene to resolve their disputes with Arthur Andersen and Andersen Worldwide, citing serious breaches of contract and irreconcilable differences. An arbitrator will decide if the firm should be excused from any further obligation to Arthur Andersen and Andersen Worldwide under the parties' operating agreements. Details will unfold in 1998.

- Effective September 1, 1997, Andersen Consulting will operate 16 global industries within five "Global Market Units": Communications, Financial Services, Government, Products and Resources. The Global Market Units will have global financial accountability (for profit/loss).

- In August 1996, the firm introduced a new end-to-end service for enterprise wide applications, called Design, Build, Run®. This service addresses the entire life cycle for applications such as Baan, Oracle, PeopleSoft and SAP—from project conception and strategy through application development and maintenance of the solution.

Company Description

Andersen Consulting is a global management and technology consulting organization whose mission is to help its clients change to be more successful. Services provided include a range of professional, systems integration, and outsourcing services.

Andersen Consulting is organized by industry practices. Examples are Automotive & Industrial Equipment, Chemicals and Communications. There are 16 principal industries effective September 1, 1997.

Andersen Consulting develops and delivers its consulting skills through four competencies—Process, Change Management, Strategic Services, and Technology—to offer solutions that apply to services such as reengineering.

Andersen Consulting recruits its people into competencies; over the course of their careers, Andersen Consulting consultants also develop industry market specialties.

Company Strategy

Andersen Consulting's vision is "to be one global firm committed to quality by having the best people with knowledge capital, partnering with the best clients to deliver value."

As a by-product of its vision, Andersen Consulting emphasizes "partnering" and "delivering value."

- Partnering—building joint teams side by side, transferring knowledge, and assuming an implementation role as well as an advisory role.

- Delivering value, according to Andersen Consulting, means an emphasis on linking the results of change initiatives to long-term client success as defined by measurable outcomes such as increased profitability and shareholder wealth

© INPUT 1998. Reproduction prohibited.

Solution centers support the development and delivery of both Andersen Consulting developed solutions and third-party software and are designed to enhance the ability to deliver upon a client's value proposition. Today there are more than 40 centers that are in place or planned worldwide.

Andersen Consulting operates as a global partnership through an international network of consultants with national practices in 47 countries.

- Andersen Consulting management cites the company's ability to capture knowledge from its worldwide operations and package the knowledge so that it can quickly be used to add value to client solutions, as one of the keys to continued growth.

- The organization emphasizes global sharing of best practices through its Knowledge Xchange® knowledge management system, an electronic network that enables the firm's 53,426 professionals to communicate and share knowledge.

Organization and Structure

Andersen Consulting currently has 137 locations in 46 countries, including 64 locations in the Americas, 54 locations in Europe/Middle East/Africa/India (EMEAI), and 19 locations in Asia/Pacific.

Andersen Consulting is a highly matrixed organization -- organized along geographic, industry, and competency lines, with industry groups focusing on go-to-market strategies and competencies on delivery. Both industries and competencies are coordinated across three global areas, the Americas, Asia/ Pacific, and EMEAI.

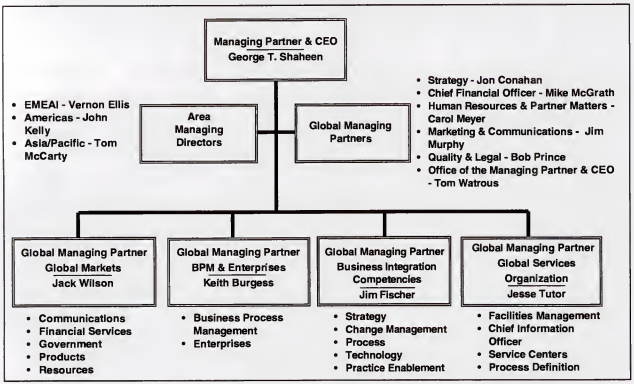
Andersen Consulting's Global Management Council sets the firm's global direction. Its mission is to analyze policy issues, review the organization's strategic direction, and ensure that Andersen Consulting's investments are consistent with that strategic direction.

Andersen Consulting also has a Quality Leadership Council to help oversee quality initiatives worldwide.

© INPUT 1998. Reproduction prohibited.

Exhibit 1

Andersen Consulting Organization Chart



Source: Andersen Consulting

Andersen Consulting's current organization is listed in Exhibit 1.
Effective September 1, 1997, all industries are organized around the following "Global Market Units," each with profit/loss accountability: Communications, Financial Services, Government, Products, and Resources.

Exhibit 2

Andersen Consulting's Industry Practices

Communications

Financial Services

- Banking
- Health Services
- Insurance

Government

Products

- Automotive & Industrial
- Electronics & High Tech
- Food & Packaged Goods
- Media & Entertainment
- Pharmaceuticals & Medical
- Retail
- Transportation & Travel

Resources

- Chemicals
- Energy
- Natural Resources
- Utilities

© INPUT 1998. Reproduction prohibited.

Exhibit 3

Andersen Consulting
Five-Year Worldwide Revenue Summary ($ Millions)

	Calendar Year				
Item	1997	1996	1995	1994	1993
Revenue	$6,647	$5,302	$4,224	$3,452	$2,876
Percent change from previous year	25%	26%	22%	20%	6%

Source: Andersen Consulting

Financials

Andersen Consulting's 1997 revenues reached $6.647 billion, a 25% increase over 1996 revenue of $5.30 billion.

According to Andersen Consulting, the organization's "real" growth—taking out the influence of international exchange rates—was 29% in 1997, compared to 27% in 1996.

Although Andersen Consulting's fiscal year end is August 31, financials are shown for calendar years ending December 31 to conform with common reporting practices. A five-year revenue summary is shown in Exhibit 3.

Revenue growth in 1997 was attributed to the following:

- Andersen Consulting's fastest growing market, the Americas, grew at 29% to $3.75 billion, up from $2.92 billion in 1996.
- The Products industry practice grew 23% in 1997, to $1.99 billion.
- The Financial Services industry practice revenue rose 28% to $1.92 billion.
 - EMEAI revenue grew 25%, Asia/Pacific revenue increased 21%, and revenue in the Americas grew 32% in Financial Services.
 - The Insurance segment revenue rose 56%, to $528 million.
- The Communications industry group revenue increased 23%, to $930 million.
- The Business Process Management practice, which provides the firm's outsourcing services, grew 58% in 1997, to $921 million.

Andersen Consulting's investment in research and development was approximately $456 million (7% of revenue) in 1997, $401 million (8% of revenue) in 1996, $383 million (9% of revenue) in 1995, and $352 million (10% of revenue) in 1994.

© INPUT 1998. Reproduction prohibited.

Exhibit 4

Andersen Consulting
Three-Year Worldwide Source of Revenue Summary ($ Millions)

	Calendar Year					
	1997		1996		1995	
Industry Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Financial Services						
- Banking	1,244	19%	1,042	20%	841	19%
- Health Services	145	2%	115	2%	125	3%
- Insurance	528	8%	338	6%	284	7%
	1,917	29%	1,495	28%	1,250	29%
Products						
- Automotive & Industrial Equipment	299	4%	211	4%	166	4%
- Electronics & High Tech	532	8%	368	7%	225	5%
- Food & Packaged Goods	319	5%	282	5%	250	6%
- Media & Entertainment	114	2%	95	2%	85	2%
- Pharmaceuticals & Medical Products	186	3%	162	3%	154	4%
- Retail	282	4%	282	5%	178	4%
- Transportation & Travel Services	256	4%	218	4%	237	6%
	1,988	30%	1,618	30%	1,295	31%
Resources						
- Chemicals	236	3%	172	3%	93	2%
- Energy	435	7%	259	5%	202	5%
- Natural Resources	206	3%	202	4%	128	3%
- Utilities	482	7%	368	7%	282	7%
	1,359	20%	1,001	19%	705	17%
Communications	930	14%	756	14%	573	14%
Government	453	7%	423	9%	380	9%
Other	0	--	9	--	21	--
Total	$6,647	100%	$5,302	100%	$4,224	100%

Note: numbers have been rounded

Source: Andersen Consulting

Revenue Analysis by Product / Service

INPUT estimates that Andersen Consulting's worldwide 1997 revenue was derived approximately as follows:

Systems integration	52%
Professional services	33%
Outsourcing services	11%
Software products	4%
	100%

Market Financials

A three-year summary of worldwide revenue by industry market, as provided by Andersen Consulting, is shown in Exhibit 4.

© INPUT 1998. Reproduction prohibited.

Exhibit 5 shows a summary that segments 1997 sources of revenue for each of Andersen Consulting's three geographic regions by industry practice.

Exhibit 5

Andersen Consulting
1997 Geographic Source of Revenue by Industry Practice
($ Millions)

Industry Practice	Geographic Region		
	Americas	EMEAI	Asia Pacific
Products	29%	32%	32%
Financial Services	26%	34%	27%
Resources	23%	18%	12%
Communications	16%	10%	16%
Government	6%	6%	13%
Total Revenue	100%	100%	100%

Source: Andersen Consulting

Geographic Markets

Approximately 56% of Andersen Consulting's 1997 revenue was derived from the Americas, 35% from EMEAI, and the remaining 9% from the Asia/Pacific region.

- Approximately $3.43 billion in 1997 revenue was derived from the U.S., compared to $2.65 billion in 1996.

A three-year summary of source of revenue by geographic region, as provided by Andersen Consulting, is shown in Exhibit 6 on the following page.

© INPUT 1998. Reproduction prohibited.

Exhibit 6

Andersen Consulting
Three-year Geographic Source of Revenue Summary
($ Millions)

	Calendar Year					
	1997		1996		1995	
Geographic Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Americas	$3,751	56%	$2,917	55%	$2,385	56%
EMEAI	2,308	35%	1,876	35%	1,420	34%
Asia/Pacific	588	9%	509	10%	419	10%
Total	$5,302	100%	$5,302	100%	$4,224	100%

Source: Andersen Consulting

Human Resources/Education

Andersen Consulting has initiated the Career Development Model in support of the company's resolution to deliver business integration.

- Andersen Consulting's emphasis is on the concept of multidisciplinary teams in a true business integration environment developing solutions to complex business cases.

During 1997, Andersen Consulting invested a total of $430 million on education (compared to $332 million or 6% of revenue the previous year), with a total of nearly 5.5 million training hours, covering 700 central training courses.

Employees

As of December 31, 1997, Andersen Consulting had 53,426 personnel worldwide, compared to 44,801 and 38,027 at year end in 1996 and 1995, respectively.

The total worldwide partner count for Andersen Consulting as of December 31, 1997 was 1,126 (included in the Consultant category), compared to a total of 1,036 partners for 1996.

- In the Americas, there were 23,710 consultants as of December 31, 1997, compared to 20,097 consultants one year prior. In EMEAI, there were 16,480 consultants as of December 31, 1997, compared to 13,576 the previous year. A breakdown of total employees for 1997 and 1996 by geographic region and function is shown in Exhibit 7.

© INPUT 1998. Reproduction prohibited.

Exhibit 7

Andersen Consulting Personnel

Region	1997	1996
Americas		
Consultants	23,710	20,097
Administrative/Support	5,020	4,042
Total Americas	28,730	24,139
EMEAI		
Consultants	16,480	13,576
Administrative/Support	3,049	2,687
Total EMEAI	19,529	16,263
Asia/Pacific		
Consultants	4,358	3,716
Administrative/Support	809	683
Total Asia/Pacific	5,167	4,399
Total Consultants	44,548	37,389
Total Admin/Support	8,878	7,412
Total Personnel Worldwide	53,426	44,801

Source: Andersen Consulting

Key Services—Competencies

Andersen Consulting provides a range of consulting and outsourcing services through a combination of its four competencies — Strategic Services, Change Management, Process, and Technology.

Solution centers are part of the total delivery mix of solutions to clients and allow Andersen Consulting to leverage knowledge capital more effectively. By working closely with client project sites, solution centers are developing and reusing both Andersen Consulting and third-party assets to deliver value-based solutions to clients.

- Solution centers are Process, Technology and Change Management Competency based and enable Andersen Consulting to more effectively bring together the elements of a business integration team.
- Andersen Consulting professionals view solution centers as an attractive career opportunity because they provide more flexibility for individuals to manage and develop their careers.
- Andersen Consulting reports that solution centers have demonstrated ability for high quality results with reduced effort and reduced elapsed time in comparison to available alternatives.

© INPUT 1998. Reproduction prohibited.

Strategic Services

- Andersen Consulting believes that transformational change is imperative for survival.
- Strategies range from optimizing the use of resources to improving competitive positioning in existing lines of business to identifying new opportunities in other industries or market segments.

Change Management

Andersen Consulting's Change Management Competency manages organizational change while minimizing the risk, errors, and productivity declines inherent in massive change.

The Change Management Competency shows clients how to anticipate changes that are likely to occur, and through the Performance Technologies Solution Center, helps to prepare the workforce for these changes with computer-based training, on-line quick reference, multimedia, and Web-based performance support.

Process

Andersen Consulting believes clients can achieve dramatic innovation by keeping abreast of emerging technologies and by evaluating their potential as process enablers. The new processes can be sustained over time by aligning measures and reward programs with process objectives .

Technology

The Technology Competency, with 12,000 professionals located worldwide, is responsible for systems integration.

Key Services—Business Process Management

Andersen Consulting offers Business Process Management in addition to performing professional services consulting. This is the organization through which the firm's outsourcing services are offered.

- Business Process Management offerings include business process outsourcing, information technology outsourcing, applications management, desktop management, network management and operations.
- The Design, Build, Run® service—all aspects of the client's business objectives including strategy, design, application development and management—is also offered through Business Process Management .
- The Business Process Management organization employs more than 8,500 professionals and represents more than 130 clients worldwide. The majority of clients are based in the U.S. and the U.K. The organization also has some assignments across Europe, the Asia/Pacific region, and Latin America.
- In April 1996, Andersen Consulting launched SENERGY℠, a Business Process Outsourcing center located in Houston (TX), providing finance and administrative

© INPUT 1998. Reproduction prohibited.

services for the energy industry. SENERGY provides shared business services such as customer service, logistics/procurement, finance, and administration, allowing oil companies to focus on their core business, improve productivity, and cut costs.

Industry Markets

Communications

The Communications Industry Segment, recorded worldwide 1997 revenue of $930 million, a 23% increase over revenue of $756 million in 1996.

With 6,000 consultants worldwide, the practice serves most of the world's major telecommunications carriers, including narrowband and broadband communications carriers, cable TV companies, wireless and satellite carriers, and Internet providers.

Financial Services

Banking

The Banking Industry Segment consists of Retail Financial Services and Financial Markets as of September 1, 1997. Retail Financial Services serves commercial banks, thrifts, credit unions, and leasing institutions. Financial Markets serves the globalization of brokerages and mutual funds businesses. Prior to September 1, 1997, Retail Financial Services and Financial Markets operated separately. 1997 revenues for Banking were $1.24 billion.

Health Services

The Health Services Industry Segment recorded worldwide 1997 revenue of $145 million, up 26% from 1996 revenue. With more than 1,500 healthcare-specific professionals in the Americas, Europe, Australia, and Asia, the practice currently serves more than 100 clients throughout the world.

Insurance

- The Insurance Industry Segment contributed $528 million in revenue during 1997, up 56% from 1996. Andersen Consulting is working with more than half of the top 50 insurance companies in the world.

Government

The Government Industry Segment increased its revenues by 7% during 1997 to $453 million.

The Government Industry practice serves national, state, provincial, and local government agencies around the world, focusing on several key segments: taxation, human services, public safety, defense, postal services, finance/administration and electronic government.

© INPUT 1998. Reproduction prohibited.

Products

Automotive & Industrial Equipment

Serving clients in the construction, automotive, fabricated metal products and industrial machinery industries, this segment's revenues in 1997 were $299 million.

Andersen Consulting has established relationships on a global basis with all of the world's top 10 original equipment manufacturers (OEMs), including Chrysler, Ford, Nissan, Volkswagen, Harley-Davidson Motor Company, Toyota, Mercedes and Fiat.

Electronics & High Tech

Serving the aerospace and defense, software, computers and office equipment, and electrical machinery and equipment segments, Andersen Consulting has established relationships with 16 of the top 25 *Fortune Global 500* computer and electronics companies. This segment's 1997 revenues were $532 million.

Food & Packaged Goods

Includes food and beverages and consumer products, and serves more than 700 clients representing food and beverage manufacturing, wholesaling, and food retailing worldwide. In 1997, this segment's revenue was $319 million.

Media & Entertainment

Revenues for Andersen Consulting's Media & Entertainment Industry Segment reached $114 million in 1997. The practice serves clients whose major product is content, including companies in the Publishing, Printing, Information Services, Entertainment and Advertising industries.

Pharmaceuticals & Medical Products

The Pharmaceuticals & Medical Products Industry Segment's 1997 revenues were $186 million.

Retail

1997 revenues in the Retail Industry Segment were $282 million.

- With more than 1700 consultants deployed worldwide, Andersen Consulting has worked with more than 450 retail clients.
- In the United States, Andersen Consulting has worked with eight of the ten largest retailers, including Sears, Roebuck & Company and Dayton Hudson.

Transportation & Travel Services

The Transportation & Travel Services Industry Segment includes passenger transportation, freight transportation and services, lodging, and travel services (travel agencies, hotels, computerized reservation systems, and rental car agencies). 1997 revenues were $256 million.

© INPUT 1998. Reproduction prohibited.

- In transportation and travel services, Andersen Consulting continues to leverage its work in Passenger Revenue Accounting (PRA) through its subsidiary enterprise PRA Solutions. The PRA System was originally developed at Northwest Airlines and, by the end of 1996, Andersen Consulting was providing PRA to five major airlines. PRA Solutions offers their PRA system, a passenger revenue accounting solution for the airline industry that combines software, processing services, implementation aids, and expertise. Available separately is a ticket audit service that recovers undercollected amounts equivalent to 0.5% - 2.0% or more of gross airline revenues.

Resources

Chemicals

The Chemicals Industry Segment had 1997 revenues of $236 million.

- DuPont and Andersen Consulting formalized a 10 year alliance in which Andersen Consulting will provide chemical and energy business solutions designed to enhance DuPont's manufacturing, marketing, distribution and customer service.

Energy

Serving global oil and gas companies, the Energy Industry Segment's 1997 revenues were $435 million. This industry segment includes energy/upstream (exploration and production) and energy/downstream (refining, distribution and retailing) segments.

Natural Resources

The Natural Resources Industry Segment, comprised of Forest Products, Metals and Mining, generated 1997 revenues of $206 million.

Utilities

The Utilities Industry Segment grew 31% during 1997 to $482 million. Andersen Consulting's Utilities Industry Segment consists of more than 2,500 professionals worldwide providing clients with products and services that support all functional areas.

Working on more than 175 utilities projects annually, the Utilities Industry Segment provides expertise in the areas of consumer services, energy delivery, energy management/marketing and trading, power generation/production, enterprise management, and enterprise transformation/strategic services.

Business Integration Centers

Andersen Consulting's business integration centers (BICs) are examples of how the firm's industry markets package the firm's practices and business integration solutions.

The centers are used as follows:

- *Industry Vision*—to demonstrate to executives leading-edge solutions for issues confronting their industry

© INPUT 1998. Reproduction prohibited.

- *Hands-on Workshops*—to develop solutions for clients outside the constraints of their own working environment

- *Education/Training*—to educate and train Andersen Consulting's employees and clients

- *Applied Research*—to gain a deeper knowledge of leading technologies and management techniques. Also, to creatively apply innovative ideas and these new technologies in a proof-of-concept environment.

Business Integration Centers are as follows:

- SMART STOREs are Andersen Consulting's focused research and development centers for the consumer industries including retailers, manufacturers, and distributors. The first, SMART STORE® Chicago, has been focused on food and packaged goods since 1989. SMART STORE Europe, in Windsor, UK, also serves the consumer industries.

- In Chicago, The Retail Place explores the retailer industry through consumer trends, market trends, research findings, industry best practices, leading -edge technologies, case-studies and change management issues.

- In Atlanta, Logistics 20•20 focuses on the concept of integrated supply and demand chain management, highlighting the impact of logistics on components of the chain.

- Also in Atlanta, Process 20•20™ is a forum for clients to learn new ideas and try new approaches for the process manufacturing industry.

- In Dallas, the Health Strategy Center explores the processes, choices and underlying technologies within the health industry.

- In Chicago, ENTERPRISE 2020 is dedicated to helping manufacturers of complex products, with an emphasis on the specific needs of the automotive and electronics industries.

- Located in Houston, Oil 20•20 is centered on the business challenges facing oil companies.. The Oil 20•20 concept has been extended to facilities in London and Singapore.

- The newest business integration center, the Financial Ideas Exchange in New York, provides a facility which explores the impact of technology on financial services as well as the need to develop and expand product lines

- The business integration center network continues to expand. The Communications Exchange, currently in the planning stages at San Ramon, California, will provide communications clients with a similar center designed for their industry.

© INPUT 1998. Reproduction prohibited.

Clients

A sample of clients by industry practice is summarized in Exhibit 8 on the following page.

Marketing and Sales

The firm's chief "sales force" consists of its partners. The firm identifies and fosters its client relations through its industries. The partners are, in turn, supported by a marketing and communications organization focused on image, business, and market development. As part of its integrated marketing approach, the firm also promotes a consistent global brand.

© INPUT 1998 Reproduction prohibited.

Exhibit 8

Andersen Consulting's Industry Practices Key Clients

Industry Practice/Clients	Industry Practice/Clients	Industry Practice/Clients
COMMUNICATIONS	U.S. Department of the Treasury	**Retail**
BellSouth	U.S. Social Security Admin.	Dayton Hudson
Deutsche Telekom AG		Sears, Roebuck & Company
Hongkong Telecom IMS Ltd.	**PRODUCTS**	
Iridium LLC	**Automotive & Industrial Equipment**	**Transportation & Travel Services**
Nokia Telecommunications	Chrysler	The Atchison, Topeka, and Santa Fe Railroad Company
Pacific Bell	Fiat	
Telecom Italia	Ford	
Telstra	Harley-Davidson Motor Company	Berliner Verkehrsbetriebe
	Mercedes	British Rail Board
FINANCIAL SERVICES	Nissan	Delta Airlines
Banking	Toyota	Deutsche Bahn
Bank of America	United Tractors	JR Tokai
Barclaycard (U.K.)	Volkswagen	Northwest Airlines
Bayerische Vereinsbank (Germany)		
Caja Espana (Spain)	**Electronics & High Tech**	**RESOURCES**
Capital Group	AMP	**Chemicals**
Chemical Bank	The Boeing Company	BASF
First Bank System	Hewlett-Packard	Bayer
Fleet Mortgage Group	LSI Logic	BOC
Great Western Bank	McDonnell Douglas	Borealis
GZS (Germany)	Motorola	BP Chemical
J.P. Morgan	NEC Technologies	Dow Chemical
London Stock Exchange	Packard Bell	DSM
Northern Trust Corporation	Polaroid	Dupont
SEI Corporation	Samsung Electronics	Grace
Wachovia	Sun Microsystems	Henkel
	Texas Instruments	Hoechst Celanese
Health Services		Norsk Hydro
FHP	**Food & Packaged Goods**	Roche
Health Net	Dial (U.S.)	Shell Chemical
	Heinz	
Insurance	ICA (Sweden)	**Energy**
Allstate	Nestle	British Petroleum
AMP (Australia)	Pepsi-Cola International	Conoco
Eagle Star (U.K.)	Philip Morris Companies, Inc.	Royal Dutch/Shell Group
Fortis, Inc.		
John Hancock	Revlon, Inc.	**Natural Resources**
Marsh & McLennan	Unilever	Boise Cascade
USAA		Cyprus Amax Minerals Company
	Media & Entertainment	Freeport-McMoRan
GOVERNMENT	BroadVision	Gold Fields
Australian Defense Force	Geffen Records	LTV Steel
City of Philadelphia	Netscape	Rautaruukki
Government of Victoria (Australia)	Wallace	Thyssen Stahl AG
Montana Department of Revenue		Votorantim Celulose y Papel (VCP)
Ohio Department of Taxation	**Pharmaceuticals & Medical Products**	
Province of New Brunswick, Canada	Astra Hassle	**Utilities**
State of New York	Astra Merck	Florida Power
U.S. Air Force	Hoechst Marion Roussel	Northern States Power
U.S. Department of Defense	Pfizer Pharmacia & Upjohn	Southern Company
	UK Medicines Control Agency	Thames Water

© INPUT 1998. Reproduction prohibited.

Alliances

Partnering with clients and third parties is a key element in Andersen Consulting's solution delivery success.

Client Alliances

- In March 1997, Andersen Consulting, IBM and Ryder Systems established an alliance to develop, set up and operate advanced logistics systems for third party companies. Per the agreement, Andersen Consulting is to take over Ryder's software development units, will be prime for all outsourced IT services and will provide some business consulting services. In this role, Andersen Consulting will also take on a portion of Ryder's 600 staff members that will be transferred to Andersen Consulting as a result of the arrangement.

- In February 1997, Andersen Consulting signed a long-term agreement with, and will become a "smart partner" in the Micro Compact Car AG joint venture between Mercedes-Benz and SMH/Swatch. Micro Compact Car AG (MCC) is responsible for the development, manufacture, and sale of "smart," a city car and mobility concept to be launched in Continental Europe in the spring of 1998. Working together, Andersen Consulting and MCC have designed and implemented the business and production processes for the vehicle.

Application Software & Technology Alliances

Andersen Consulting has a portfolio of alliances with the major hardware and software providers. Depending on market needs, alliances are managed on a global or industry-focused basis.

Andersen Consulting global alliances include companies such as, Hewlett-Packard, Oracle, PeopleSoft, SAP, Siebel Systems and Sun Microsystems. Industry-focused alliances include Baan, Manugistics, and Retek.

Additionally, Andersen Consulting has established alliances with leading technology providers including 3Com, Bay Networks, Digital Equipment, Documentum, FileNet, IBM, Informix, Microsoft, Sybase, Viasoft and Viewstar.

- In June 1997, Andersen Consulting and PeopleSoft Inc. announced an alliance to jointly develop PeopleSoft Financials for Federal Government, an integrated financial management system designed to address the specific needs of the U.S. federal government, while offering a solution to the Year 2000 problem.

- In February 1997, North Communications and Andersen Consulting entered into a global marketing agreement. The cooperative agreement will focus on government human services, postal, justice, and public safety agencies. Andersen Consulting will provide business integration and reengineering services for solutions involving multimedia kiosk networks. North Communications will provide the supporting hardware and software.

© INPUT 1998. Reproduction prohibited

Competition

Andersen Consulting's major competitors include Electronic Data Systems, IBM, Computer Sciences Corporation, and MCI Systemhouse.

INPUT Assessment

Andersen Consulting's major strengths include its global presence in strategy and change management, its ability to use internal resources or partner effectively (or both) when internal resources alone cannot fill a need, and its willingness to innovate.

Major challenges over the coming year include maintaining growth in a highly competitive business process outsourcing market, maintaining a favorable public image as the proposed dissolution of obligations to Arthur Andersen and Andersen Worldwide proceeds, and expanding successful, but primarily North American, practices such as Resources to other regions.

© INPUT 1998. Reproduction prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

May 1996

Andersen Consulting

Managing Partner: George T. Shaheen
100 South Wacker Drive
Chicago, IL 60606
Phone: (312) 372-7100
Fax: (312) 507-8970
Internet: http://www.ac.com

ANDERSEN CONSULTING

Status:	Partnership
Total Consultants:	31,705 (12/95)
Total Personnel:	38,027 (12/95)
Revenue:	$4.22 billion
Calendar Year End:	12/31/95

Key Points

- Andersen Consulting uses its business integration approach—aligning a client's technology, people, and business processes with its strategy—to achieve best business performance.
- Andersen Consulting attributes the company's success to delivering value to its clients through its people and global reservoir of knowledge.
- Being global means ensuring that Andersen Consulting's clients have access to consistent, high standards of quality and best thinking regardless of where the clients or Andersen Consulting staff are located.
- In September 1995, Andersen Consulting established a global structure for its Communications Industry Group. It has named 11 partners with specific geographical and functional responsibilities within the communications practice.
- The Communications Industry Group posted the fastest growth of Andersen Consulting's six primary industry practices for the third year in a row, growing 57% to $573 million.

© INPUT 1996. Reproduction prohibited.

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

- During 1995, Andersen Consulting formed a new global Foundation Software Organization, consolidating its country-based resources into a network of regional competency centers to provide enterprise application development tools, methodologies, and services throughout the world.

- In 1995, Andersen Consulting successfully completed its inaugural Andersen Consulting World Championship of Golf, a forum that offers the firm opportunities to promote its brand via client involvement and advertising.

Company Description

Andersen Consulting is a global management and technology consulting organization whose mission is to help its clients change to be more successful. By working with clients to align their business elements—people, strategy, processes, and technologies—Andersen Consulting helps clients achieve business integration, the optimal working environment in which business elements work in tandem to achieve best business performance. Services provided include a range of professional, systems integration, and outsourcing services.

- Andersen develops its consulting skills through four competencies—Process, Change Management, Strategic Services, and Technology—to offer solutions that combine services ranging from reengineering to business process management.

- Andersen Consulting recruits its people into competencies; over the course of their careers, Andersen Consulting consultants also develop industry market specialties.

Andersen delivers its management and consulting services through its industry practices, the source of its best practices consulting knowledge.

- Andersen Consulting builds client relations by industry, initiates thought leadership, such as its annual Customer Contact Forum for the communications industry, and delivers best practices through initiatives such as Business Integration Centers (BICs), described later in this document.

- Andersen Consulting's industry practices include Process/Energy, Industrial Products, Consumer Products, Communications, Government, Financial Services, Healthcare, and Utilities.

Company Strategy

Andersen Consulting's vision is "to be one global firm committed to quality by having the best people with knowledge capital, partnering with the best clients to deliver value."

As a by-product of its vision, Andersen Consulting emphasizes "partnering" and "delivering value."

- Partnering is part of a trend to "consult with" not "consult to" clients. In order to help a client effect complex change, Andersen Consulting believes that the consultant must be closely involved with the client. This means building joint teams side by side, transferring knowledge, and assuming an implementation role as well as an advisory role.

- Delivering value, according to Andersen Consulting, means an emphasis on linking the results of change initiatives to long-term client success as defined by measurable outcomes such as increased profitability and shareholder wealth (as opposed to emphasizing the processes and tasks required to deliver a solution). As a

© INPUT 1996. Reproduction prohibited.

consequence, according to Andersen Consulting, "a focus on adding value rules out working on limited projects that may or may not relate to a client's strategic mission. Instead, adding value calls for working with a client as a long-term business partner to genuinely create a far more successful enterprise."

Andersen Consulting goes to market via its industry practices, applying in-depth industry knowledge and experience to make the application of its competencies relevant to its clients' specific needs. Andersen continues to open new industry-focused Business Integration Centers to help clients visualize how they can change to be more successful.

Andersen Consulting's client service model for delivering solutions is "business integration"—the linkage of core business components. For change to work, an organization's people, processes, and technology must be linked to its strategy.

Andersen Consulting remains fully committed to the reengineering market as demonstrated by such initiatives as its internal training workshops and its Value Driven Re/Engineering Workbench, an engagement tool that helps clients combine corporate vision with business processes. The organization estimates that approximately $1.14 billion of its 1995 revenue was attributed to reengineering work.

Andersen Consulting is committed to meeting the transnational needs of clients, operating as a global partnership through an international network of consultants with national practices in 47 countries.

- Andersen management cites the company's ability to capture knowledge from its worldwide operations and package the knowledge for the benefit of clients as one of the keys to continued growth.

- The organization emphasizes global sharing of best practices through its Knowledge Xchange™ knowledge management system, an electronic information network that links the firm's 38,000 professionals at client sites worldwide.

Andersen Consulting has helped create DAVINCI to illustrate how a virtual organization can operate successfully.

- Andersen Consulting teams with leading technology companies to create a model of a global business enterprise that is pursuing a multibillion-dollar opportunity in a remote Asian location.

- The result of this collaboration is the DAVINCI Virtual Corporation, which illustrates how organizations can implement innovative business strategies by using state-of-the-art technologies.

- Business leaders can experience the DAVINCI Virtual Corporation through one-day workshops at Andersen Consulting's Centers for Strategic Technology in California and France.

Organization and Structure

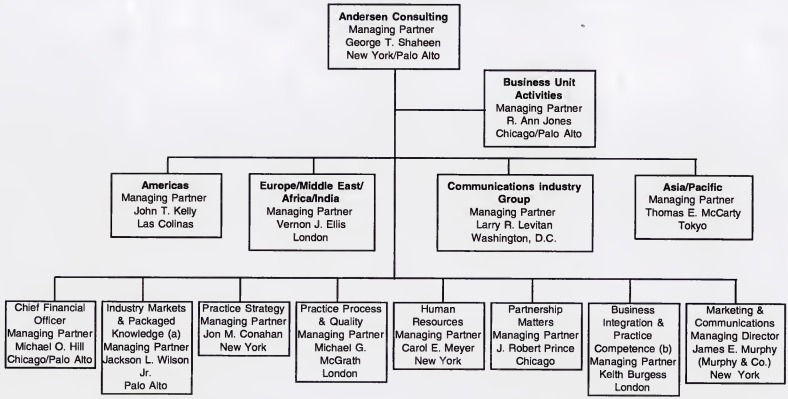
Andersen Consulting currently serves clients through 149 locations in 47 countries, including 73 locations in the Americas, 57 locations in Europe/Middle East/Africa/India (EMEAI), and 19 locations in Asia/Pacific.

- Andersen Consulting's current organization is led by the firm's Executive Committee, whose members are listed in Exhibit A.

- Andersen Consulting's services and products are offered through its six global industry practices, which are outlined in Exhibit B.

© INPUT 1996. Reproduction prohibited.

Exhibit A
Andersen Consulting Executive Committee



(a) Includes Andersen Consulting's industry markets.

(b) Includes Business Process Management, Change Management, Process, Strategic Services, and Technology

© INPUT 1996. Reproduction prohibited.

Exhibit B
Andersen Consulting Industry Practices

Industry Practice	Industry Practice
Products • Consumer Products - Food and consumer packaged goods - Pharmaceuticals - Retail and wholesale distribution - Transportation and travel services • Industrial Products - Automotive - Electronics/high-tech - Aerospace and defense - Consumer durables - Industrial equipment • Process/Energy - Chemicals - Energy/upstream - Energy/downstream - Natural resources - Pulp/paper - Metals/mining **Communications** • U.S. interexchange carriers • U.S. local exchange carriers • Global carriers • State-owned European and Asian PTTs • Wireless communications providers (PCS/PCN) • Cable companies • Information and service providers • Satellite companies • Multimedia companies **Utilities** • Utilities Industry Practices • Consumer Services • Energy Delivery • Energy Management, Marketing & Trading • Power Generation/Production • Corporate Services • Enterprise Transformation/Thought Leadership **Healthcare** • Integrated healthcare systems • Other providers • Health insurers • Managed care organizations • Policy-making authorities • Purchasers • Suppliers	**Financial Services** • Insurance - Life - Property and casualty - Health and health management - Disability - Reinsurance - Brokerage • Retail Financial Services - Commercial banks - Thrifts - Credit unions - Finance - Leasing • Financial Markets - Investment banking - Brokerage - Exchanges and depositions - Mergers and acquisitions - Swaps - Portfolio management - Equity products - Commodities - Risk management - Securitization - Fixed income - Mortgage - Off-balance-sheet products - Investment management **Government** • National, state and local government organizations and departments - Revenue - Health and human services - Labor - Financial management - Administration - Human resources - Retirement - Postal - Defense - Justice/Public Safety - Environment - Education - Transportation - Lotteries

© INPUT 1996. Reproduction prohibited.

- Andersen also has a Quality Leadership Council to help oversee quality initiatives worldwide and a Global Management Council whose mission is to analyze policy issues, review the organization's strategic direction, and ensure that Andersen Consulting's investments are consistent with that strategic direction.

Jack Wilson, Managing Partner, Industry Markets and Packaged Knowledge

Andersen Consulting's primary distribution channels are its industries, which are headed by Jack Wilson. He ensures that Andersen Consulting targets the appropriate industries over the long term, invests dollars accordingly, and builds experts who can deliver services for industries ranging from industrial products to utilities. He also works with the firm's worldwide managing director of Marketing and Communications, Jim Murphy, to ensure that the firm's integrated marketing investments target clients through its industry markets.

The global industry managing partners reporting to Jack Wilson are:

- Financial Services—John Skerritt (New York)
 - Financial Markets—Aram Shishmanian (London)
 - Insurance—Dave Hoffman (Chicago)
 - Retail Financial Services—John Skerritt (New York)
- Government—David Hunter (Sydney)
- Healthcare—David Rey (San Francisco)
- Products—Pete Peterson (Chicago)
 - Consumer Products—Steve Johnson (Chicago)
 - Industrial Products—Carl Kilmer (Boston)
 - Process/Energy—David Crow (Atlanta)
- Utilities—Bob Anclien (Atlanta)

Larry Levitan, Managing Partner, Communications Industry Group

Larry reports directly to George Shaheen. Larry is based in Washington, D.C.

Vernon Ellis, Managing Partner, EMEAI; John Kelly, Managing Partner, Americas; Tom McCarty, Managing Partner, Asia/Pacific

Although Andersen Consulting goes to market through its industries, the company also needs to ensure that it delivers consistent, high-quality service across the world while meeting the needs of clients locally. In order to "think globally, yet act locally," Andersen Consulting has managing partners in charge of its three geographic areas to ensure that its 149 locations in 47 countries are meeting client needs unique to their local markets.

Keith Burgess, Managing Partner, Business Integration and Process Competence

Keith Burgess is in charge of Andersen Consulting's competencies—Change Management, Process, Strategic Services, Technology, and Business Process Management. Essentially, Keith ensures that Andersen Consulting develops and applies the appropriate skills and resources so that the firm practices business integration. Managing partners reporting to Keith include:

- Change Management—Terry Neill (London)
- Process—Barry Patmore (Los Angeles)
- Strategic Services—Peter Fuchs (London)
- Technology—Ed Schreck (Chicago)
- Business Process Management—Joellin Comerford (New York)

© INPUT 1996. Reproduction prohibited.

Jon Conahan, Managing Partner, Practice Strategy

Jon Conahan is George Shaheen's point person for formulating and executing Andersen Consulting's strategic direction. Andersen periodically re-evaluates its lines of business and its client needs through initiatives such as Horizon 2000, an initiative undertaken in 1991 that resulted in the creation of Andersen Consulting's vision statement, its Global Management Council, and a host of other changes designed to keep the firm attuned to its market. Jon is in charge of crystallizing strategy and communicating it to the partners.

Mike McGrath, Managing Partner, Practice Process and Quality

Mike McGrath chairs Andersen Consulting's Quality Management Council. Essentially, his job is to ensure that Andersen Consulting always builds quality into its work, that methodologies are sound and that the company has a system for total quality improvement.

Other Executive Committee Members Reporting to George Shaheen

Jim Murphy directs all of Andersen Consulting's marketing and communication efforts. Carol Meyer directs internal human resources policies. Bob Prince directs partnership matters. Ann Jones manages Business Unit affairs. Mike Hill is the firm's chief financial officer.

Financials

Andersen Consulting's 1995 revenues reached $4.22 billion, a 22% increase over 1994 revenue of $3.45 billion.

According to Andersen Consulting, the organization's "real" growth—taking out the influence of international exchange rates—was 19% in 1995, compared to 19% in 1994 and 13% in 1993.

Although Andersen Consulting's fiscal year end is August 31, financials are shown for calendar years ending December 31 to conform with common reporting practices. A five-year revenue summary follows:

Andersen Consulting
Five-Year Revenue Summary
($ Millions)

	Calendar Year				
Item	1995	1994	1993	1992	1991
Revenue	$4,224	$3,452	$2,876	$2,723	$2,341
• Percent change from previous year	22%	20%	6%	16%	14%

Revenue growth in 1995 was attributed to the following:

- Communications, Andersen Consulting's fastest growing industry practice, grew at 57% to $573 million, up from $364 million in 1994. Strong growth was reported worldwide, with 43% growth in the Americas, 58% growth in Asia/Pacific, and 121% growth in EMEAI.
- Industrial Products grew 53% to $487 million.

© INPUT 1996. Reproduction prohibited.

- The company achieved strong growth across all its global areas—Asia/Pacific (27% growth), the Americas (23% growth), and Europe/Middle East/Africa/India (20% growth).

- Business reengineering revenues rose 22% to $1.14 billion in 1995, up from $932 million in 1994, $775 million in 1993, and $700 million in 1992.

- Revenues from client/server engagements rose 31% to $2.53 billion, up from $1.93 billion in 1994, $1.47 billion in 1993, and $1.08 billion in 1992.

- Revenues from object technology engagements reached $126 million in 1995, up from $78 million in 1994 and $38 million in 1993.

Andersen Consulting's investment in research and development was approximately $383 million (9% of revenue) in 1995, $352 million (10% of revenue) in 1994, $328 million (11% of revenue) in 1993, and $286 million (11% of revenue) in 1992.

Revenue Analysis by Product / Service

INPUT estimates that Andersen Consulting's worldwide 1995 revenue was derived approximately as follows:

Systems integration	56%
Professional services	30%
Outsourcing services	9%
Software products	5%
	100%

INPUT estimates that approximately 52% of Andersen Consulting's $2.1 billion in U.S. 1995 revenue was derived from systems integration, 33% from professional services, 10% from outsourcing services, and 5% from software products.

Market Financials

A three-year summary of worldwide revenue by industry market, as provided by Andersen Consulting, follows:

© INPUT 1996. Reproduction prohibited.

Andersen Consulting
Three-Year Source of Revenue Summary
($ Millions)

	Calendar Year					
	1995		1994		1993	
Industry Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Products						
- Consumer Products	$809	19%	$752	22%	$615	21%
- Industrial Products	487	11%	318	9%	307	11%
- Process Mfg./Energy	406	10%	310	9%	290	10%
	$1,702	40%	$1,380	40%	$1,212	42%
Financial Services						
- Retail Financial Services	$531	13%	$434	13%	$301	10%
- Financial Markets	310	7%	322	9%	245	9%
- Insurance	284	7%	218	6%	169	6%
	$1,125	27%	$974	28%	$715	25%
Communications	573	14%	364	11%	239	8%
Government	396	9%	339	10%	303	11%
Utilities	282	7%	225	6%	232	8%
Healthcare	125	3%	97	3%	82	3%
Other	21	--	73	2%	93	3%
Total	$4,224	100%	$3,452	100%	$2,876	100%

Geographic Markets

Approximately $2.1 billion (50%) of Andersen Consulting's 1995 revenue was derived from the U.S., a 21% increase over 1994 U.S. revenues of approximately $1.74 billion.

Approximately 56% of Andersen Consulting's 1995 revenue was derived from the Americas, 34% from EMEAI, and the remaining 10% from the Asia/Pacific region.

A three-year summary of source of revenue by geographic region, as provided by Andersen Consulting, is shown on the following page.

Also shown on the following page is a summary that segments 1995 sourcex of revenue for each of Andersen Consulting's three geographic regions by industry practice.

© INPUT 1996. Reproduction prohibited.

Andersen Consulting
Three-Year Geographic Source of Revenue Summary
($ Millions)

	Calendar Year					
	1995		1994		1993	
Geographic Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Americas	$2,385	56%	$1,941	56%	$1,574	55%
EMEAI	1,420	34%	1,181	34%	1,043	36%
Asia/Pacific	419	10%	330	10%	259	9%
Total	$4,224	100%	$3,452	100%	$2,876	100%

Andersen Consulting
1995 Geographic Source of Revenue by Industry Practice
($ Millions)

	Geographic Region		
Industry Practice	Americas	EMEAI	Asia/Pacific
Products	44%	36%	32%
Financial Services	21%	37%	24%
Communications	15%	9%	19%
Government	8%	9%	16%
Utilities	6%	8%	8%
Healthcare	5%	1%	1%
Other	1%	1%	1%
Total Revenue*	100%	100%	100%

* *Differences due to rounding.*

Acquisitions

In February 1995, Andersen Consulting acquired The Hampton Group, a leading strategic and operation consulting firm for trust, investment services, securities, and brokerage organizations.

- The Hampton Group, based in New York (NY) with a staff of 10, provides a range of services, including strategic business planning, marketing and sales strategy development, and technology-enabled business process design.
- The acquisition enhances Andersen Consulting's services to financial services clients, including banks that offer trust and investment products and services, and will allow it to pursue new opportunities as financial services companies confront market change.

© INPUT 1996. Reproduction prohibited.

- The Hampton Group retains its name and continues its current industry focus, operating under the direction of Michael J. May, managing partner of Andersen Consulting's Strategic Services practice for the financial services industry.

Human Resources/Education

Andersen Consulting has initiated the Career Development Model in support of the company's resolution to deliver business integration.

- This model realigns recruiting, training, education, career development, advancement options, compensation, structures, and counseling for Andersen personnel.

- The emphasis on broader, deeper, and more focused skills to accommodate business integration has led to hiring of experienced specialists, particularly in strategy and change management.

- Training courses are focused on real-life business integration cases.

- Andersen's emphasis is on the concept of multidisciplinary teams in a true business integration environment developing solutions to complex business cases.

During 1995, Andersen Consulting invested a total of $290 million (7% of revenue) on education, with a total of nearly four million training hours, covering 700 central training courses. During the year, there were 11,200 client/server trainees and 706 object technology trainees.

Interactive multimedia technology is being used on a worldwide basis in local offices and in centralized training. For example, the Business Practice Course is an interactive self-study multimedia training product that teaches new Andersen professionals basic functions through a simulated client engagement.

Through Andersen Consulting Education, more than 700 courses are available to each Andersen Consulting consultant. By the time a consultant reaches the associate partner level, he or she will have received more than 1,000 hours of education.

- The Center for Professional Education, located in St. Charles (IL), is the organization's hub for internal training and has more than 135 classrooms accommodating more than 1,800 participants.

- Other worldwide training locations include Melbourne (Australia), Singapore, and Veldhoven (the Netherlands).

- Training also takes place in local offices.

- Following initial training, consultants return to St. Charles approximately every 18 months for additional training.

Employees

As of December 31, 1995, Andersen Consulting had 38,027 personnel worldwide, compared to 32,711 personnel worldwide as of December 31, 1994.

- The total partner count for Andersen Consulting in 1995 was 965 (included in the Consultant category), compared to a total of 878 partners for 1994.

- A breakdown of total employees for 1995 by geographic region and function follows:

© INPUT 1996. Reproduction prohibited.

Andersen Consulting Personnel

Region	Personnel
Americas	
Consultants	17,358
Administrative/Support	3,520
Total Americas	20,878
EMEAI	
Consultants	10,961
Administrative/Support	2,197
Total EMEAI	13,158
Asia/Pacific	
Consultants	3,386
Administrative/Support	605
Total Asia/Pacific	3,991
Total Consultants	31,705
Total Admin/Support	6,322
Total Personnel Worldwide	38,027

Key Services—Competencies

Andersen Consulting provides a range of consulting and outsourcing services through a combination of its four competencies—Strategic Services, Change Management, Process, and Technology.

Developing full services, primarily from within, is key to Andersen Consulting's approach of partnering—delivering not only advice, but also implementation. Andersen Consulting believes that each competency and service offering must be as good as or better than a client's next available alternative. But the organization believes that the best value from a client's standpoint is enjoying the use of all the services in combination. On client projects, the competency specialists remain involved throughout the entire client relationship. They work collaboratively and iteratively, adjusting as they go. Work is not handed off from one competency to the next.

Strategic Services

Andersen Consulting believes that transformational change is imperative for survival. Companies don't want management consultants who simply study a problem and write up a report—leaving the clients to fend for themselves as they struggle to turn theory into practical reality. Convinced that most large organizations are overstudied and underimplemented, Andersen Consulting's Strategic Services practice is focused on helping clients develop a competitive strategic direction that is executable within the client's organization.

- Deep industry knowledge, world-class organizational skills, and ongoing investments in building knowledge capital enables the Strategic Services practice to devise strategies and implementation plans for companies.

- Andersen Consulting's other competency groups—Change Management, Process, and Technology—contribute points of view and expertise in the strategy formulation process to ensure that the strategy developed for the client is implementable.

- The Strategic Services practice works with leading companies around the world, academic and industry associations, and other nonprofit organizations. This practice:

 - Has grown sevenfold since 1989
 - Has about 1,400 professionals working around the globe
 - Is among the top five largest strategy practices in the world, and one of the fastest growing
 - Has Logistics Strategy and Information & Technology Strategy practices that are leaders in their fields
 - Has ongoing research programs in global enterprises; alliances and mergers and

© INPUT 1996. Reproduction prohibited.

acquisitions; supply chain management; information and technology strategy; virtual retailing; and numerous research projects in specific industries

Change Management

Since human performance directly affects business performance, the Change Management practice helps clients determine which aspects of work force performance must change to meet business objectives.

- The practice arms clients with the tools and methodologies to help them manage their change process efficiently. This means that revenue, profit delivery, and productivity are optimized during change and that new performance targets are met rapidly, effectively, and predictably.

- The practice defines Change Management as the discipline that ensures that organizations and employees meet new and existing performance targets rapidly and effectively. It does this by helping clients create the right management disciplines and processes, organization structures, culture, and competencies for superior human performance so that change goals are achieved and sustained.

- The practice strives for three business outcomes for client organizations:

 - Employees deliver performance targets on time and on budget

 - Stakeholders, such as investors, lenders, and suppliers, remain loyal during change and new stakeholders are attracted

 - Risks associated with large-scale change, like productivity declines and project redundancies, are reduced or eliminated

- Andersen Consulting is differentiating its change management capabilities in the market by:

 - Size—3,000 plus professionals with growth in global markets ranging from 20% to 50% annually

 - Reach—strong presence in major global markets, and seminal work in emerging markets like China

 - Range—contributes skills and expertise in areas ranging from leadership coaching and development to organizational design, culture change, and advanced applications of technology, including breakthrough work in business simulation

 - Methods—building deep skills within client organizations to change rapidly and effectively

 - Thought leadership—global research initiatives under way on all continents on the knowledge worker, cost of incompetence, and capacity to change

Process

The *Process* competency's mission is to apply process design principles, best practices, and information technology to design and implement processes to achieve outcomes that deliver value. The magnitude of process change can range from streamlining to business reengineering to enterprise transformation. Targeted processes include:

- Developing products and services—concurrent, fast-to-market design/engineering

- Generating demand—achieving customer satisfaction with micromarketing, value-added services, and market intelligence

© INPUT 1996. Reproduction prohibited.

- Producing and delivering products and services—reengineering of supply chains, order fulfillment, and integration of design and manufacturing

- Managing the enterprise—reengineering support processes such as financial, human resources, and information management to make them more responsive to internal customers' needs

Technology

The *Technology* competency is responsible for delivering technology expertise via systems integration to assist clients in expanding business opportunities, creating new markets, and rejuvenating existing products.

- Andersen Consulting has demonstrated its commitment to technology through some key initiatives: the opening of the Center for Strategic Technology in Palo Alto (CA); the opening of a similar center in Sophia Antipolis (France); and the establishment of a technology park in Northbrook (IL) in late 1995.

- The Technology Park, Northbrook, is home to Andersen Consulting's Center for Strategic Technology Research (CSTaR), Technology Integration Services (TIS) Worldwide, the Chief Information Officer group, Eagle, FOUNDATION, Legacy Products, Methodology, Practice Process & Quality, Software Intelligence, Solutions Planning, and Solutions Delivery.

- The Technology Park, Sophia Antipolis, includes: TIS EMEAI, Eagle, FOUNDATION, the Communications Industry Group, and the Center for Strategic Technology.

- Systems integration projects may require the design and installation of systems using custom-designed or packaged software, expertise in project management, and change management computer-based training.

- The Knowledge Xchange™ knowledge management system is a firmwide communications system that allows Andersen Consulting consultants from around the world to trade ideas and exchange knowledge and experience.

- The organization is committed to offering client/server and object technology solutions for its clients.

- The Network Solutions practice delivers services to clients worldwide that combine voice, data, image, and video communications with business and industry expertise—delivering an integrated, worldwide networking solution.

- Responsibility for technology R&D resides within the Research organization, which includes CSTaR (Center for Strategic Technology Research). This group conducts applied research with advanced technologies to identify new classes of applications that will describe the future home and office, and new means of implementing such applications.

Key Services—Business Process Management

Andersen Consulting offers Business Process Management in addition to performing professional services consulting.

- Business Process Management represents one of Andersen Consulting's core offerings in which the firm takes responsibility for the operation of one or more business processes according to defined levels of performance. By managing and refining ongoing business processes, Andersen allows its clients to focus on their core operations.

© INPUT 1996. Reproduction prohibited.

- The Business Process Management organization employs more than 5,600 professionals and represents more than 130 clients worldwide.

- In June 1995, Andersen Consulting and GE Capital Corporation formed an alliance to pursue opportunities in the U.S. outsourcing market. Under the alliance, Andersen Consulting will help companies manage and continuously improve their entire IT function, while GE Capital will provide processing services.

- In January 1996, Andersen Consulting, Canada and GE Capital Technology Services (GECTS) formed an outsourcing alliance for the Canadian market that parallels the 1995 U.S. alliance. Andersen Consulting will help companies manage and improve their entire range of IT capabilities and GECTS will provide large computer and client/server services. In addition, GECTS has acquired the assets and staff of Andersen Consulting's Etobicoke-based OM/NI Solutions Centre.

- In April 1996, Andersen Consulting launched SENERGY for the energy industry, a business service that frees companies to focus on their core business and, secondly, improves productivity while cutting costs. SENERGY will meet these needs by managing key business processes such as customer service, logistics/procurement, finance, and administration for multiple companies. SENERGY services will be delivered from a facility in Houston.

Industry Markets

Andersen Consulting does not promote itself as a "strategy house" or a "technology firm," but goes to market through its industries.

- Andersen Consulting's industry practices are wellsprings for its best practices such as reusable software that is packaged and transferred across multiple clients within an industry. An example is Andersen Consulting's CUSTOMER/1, which is a customer service software package that provides support for customer contact and billing functions for electric, gas, and water utilities around the world.

- The Andersen Consulting FOUNDATION Software Organization delivers market-enabled versions of the firm's proven methodology (METHOD/1) and development tools, which are based on the experience and knowledge gained on thousands of development projects each year.

- Andersen Consulting's Business Integration Centers (BICs) are examples of how the firm's industry markets package the firm's best practices and showcase business integration solutions. The BICs are specifically designed working environments where senior executives can explore and shape solutions for their companies.

- Andersen Consulting's Eagle has developed a fundamentally new process for the design and development of business software. An integrated set of tools, architectures, processes, patterns, and reusable components, Eagle is now being used by clients in the insurance, banking, and communications industries to build new claims, call center, and billing-related applications.

The following discussion summarizes Andersen Consulting's services by industry practice.

Products Industry Practice

The Products Industry practice is composed of three major segments—Consumer, Industrial, and Process/Energy. Overall revenues

© INPUT 1996. Reproduction prohibited.

reached $1.7 billion in 1995, a 23% increase over $1.38 billion in 1994.

The Consumer Products segment, which includes food and consumer packaged goods, pharmaceuticals, retail and wholesale distribution, and transportation and travel services, achieved an 8% revenue increase in 1995, to $809 million. Business Integration Centers continue to help stimulate strong sales in the food and consumer packaged goods segments, as well as in retail and wholesale distribution.

Andersen Consulting has established relationships with six of the seven largest *Fortune Global 500* food manufacturing companies, as well as relationships with three of the four largest *U.S. Fortune 1000* general merchandisers, and six of the 10 largest *Fortune Global 500* pharmaceutical companies.

Project examples in this segment include:

- Providing consulting and systems integration services to implement an advanced merchandise management system for ShopKo Stores Inc.
- Providing outsourcing services in support of Filene's Basement (an apparel chain) financial, distribution, and merchandising applications
- Reengineering merchandise procurement processes, including buying, replenishment, transportation, distribution, inventory management, and merchandise receipt/payment, at Sears Canada
- In the food segment, providing a range of transformational work for Dial (U.S.), Domino's Pizza, ICA (Sweden), Heinz, KFC, Nestle, Philip Morris Companies Inc., Unilever, and Revlon, Inc.
- Revamping the financial planning system for Pepsi-Cola International's Latin America Division
- In the pharmaceutical market, a range of transformational work for Astra Merck, Hoechst, Pharmacia, Sandoz, and Pfizer
- In the transportation and travel services segment, Andersen Consulting continues to leverage its work in Passenger Revenue Accounting (PRA), a system originally developed at Northwest Airlines. By the end of 1995, Andersen was providing PRA to five major airlines.
- For Delta Airlines, providing a range of services, including restructuring and automating Delta's entire finance department
- In the railroad/rapid transit segment, a range of work for The Atchison, Topeka, and Santa Fe Railway Company, JR Tokai, Berliner Verkehrsbetriebe, and the British Rail Board
- In the entertainment, media, and information services segment, Andersen redefined a new, scalable information design, and a new look and feel for the Sega of America Web site. It helped deliver technical infrastructure, allowing Sega to begin conducting commerce via the Internet.

The Industrial Products segment recorded 1995 revenue of $487 million, a 53% increase over 1994, due to the resurgence of the automotive market, continued expansion in the electronics sector, and general improvement in economic conditions. Andersen Consulting has anticipated marketplace shifts and focused its skills accordingly—from traditional factory streamlining to enhancing customer relationships, sales effectiveness, product

© INPUT 1996. Reproduction prohibited.

development, and generation of new business. Andersen Consulting has established relationships with nine of the top 10 *Fortune Global 500* automotive companies, and with 16 of the top 25 *Fortune Global 500* computer and electronics companies.

Project examples in this segment include:

- In the automotive industry, key engagements with industry leaders such as Chrysler, Ford, Nissan, Volkswagen, Harley-Davidson Motor Company, and Fiat
- In the electronics industry, key engagements with companies including Motorola, Polaroid, Hewlett-Packard, Samsung Electronics, NEC Technologies, AMP, Packard Bell, Sun Microsystems, LSI Logic, and Texas Instruments
- In the industrial equipment sector, key engagements with companies such as Caterpillar and Mitsubishi Caterpillar Forklift
- In the consumer durables sector, key engagements with companies such as Johnson Matthey, plc, Stanley Works Inc., and UCAR Carbon Company
- In the aerospace and defense sector, key engagements with companies such as The Boeing Company and McDonnell Douglas
- In July 1995, Andersen Consulting was awarded a ten-year, $350 million contract with The LTV Corporation to manage the steelmaker's information systems.

The Process/Energy segment achieved a 31% increase in revenue during 1995 to $406 million. Project examples in this segment include the following:

- Reengineering services, software configuration, development, and implementation services for Conoco's core business systems. Andersen is also handling the U.K. financial management operations for Conoco's drilling and piping divisions.
- Working with DuPont under a three-year agreement to globally "retool" 1,400 DuPont information systems personnel by applying Andersen Consulting's METHOD/1 methodology and development tools and supplementing DuPont's internal resources with Andersen Consulting's resources, improved organization, and management processes
- Operating three Dow Chemical application development and support centers
- A ten-year, $120 million contract with British Petroleum (BP) to manage BP's financial administrative services in the U.S. Andersen Consulting also has a five-year, $89 million contract with BP Exploration for similar services in Europe.
- Providing application maintenance and development services in support of a new client/server environment for Freeport-McMoRan
- Managing IT applications, including financial and administrative systems and equipment and product operation systems, for Halliburton Energy Systems as part of a 10-year, $500 million contract
- Partnering with SAP AG and several oil companies for the redevelopment of SAP's successful R/2 (mainframe) downstream IS-Oil product onto an R/3 (client/server) platform. Active participants include Chevron, Crown Central Petroleum, Elf, Mobile, Petrofina, Star Enterprise, Sunoco Canada, and Texaco.

© INPUT 1996. Reproduction prohibited.

- Various projects for Royal Dutch Shell, Italy's AGIP, and Spain's Petrogal

Financial Services

The Financial Services practice—comprising Retail Financial Services, Financial Markets, and Insurance—generated 1995 revenue of $1.125 billion, a 16% increase over 1994.

The Retail Financial Services segment generated revenue of $531 million in 1995, up 22% over 1994. Project examples include:

- Developing software and computer systems for mortgage loan origination, processing, and servicing for Fleet Mortgage Group
- Providing Postbanken (Norway) with the FOUNDATION client/server application development toolset to build a new customer service system
- Providing custom programming and support services for SEI Corporation's TRUST 3000 product
- Working with Caja Espana (Spain) to develop retail financial service extensions to FOUNDATION
- Implementing the TRIUMPH card processing system (developed with Banc One) for Barclaycard (U.K.) and GZS (Germany)
- Providing transformation change/strategic services for Chemical Bank, Wachovia, Bank of America, Great Western Bank, and First Bank System

The Financial Markets segment reported 1995 revenue of $310 million, down 4% from 1994. Much of this segment's work for brokerages and mutual funds calls for reconfiguring these businesses to support global operations. Projects include:

- Providing outsourcing services to run the automated trading floor at the London Stock Exchange
- Other clients include J.P. Morgan, Capital Group, and Northern Trust Corporation.

The Insurance segment contributed $284 million in revenue during 1995, up 30% from 1994. Andersen Consulting is working with more than half of the top 50 insurance companies in the world. Projects include:

- Reengineering of key claims processes for Fortis, Inc.
- Development and implementation of new systems, products, and organizational structures for Eagle Star (U.K.)
- Building a mission-critical life insurance new business and contract administration system with USAA
- Reengineering the customer service processes at John Hancock
- Supporting client servicing and risk management applications for Marsh & McLennan
- Assisting in the reengineering of the underwriting processes for Allstate
- Effecting wide-scale transformational change for AMP of Australia

© INPUT 1996. Reproduction prohibited.

Communications

The Communications Industry practice, Andersen Consulting's fastest growing practice area, recorded worldwide 1995 revenue of $573 million, a 57% increase over 1994 revenue of $364 million.

- With nearly 4,000 consultants worldwide, the practice serves most of the world's major carriers, including narrowband and broadband communications carriers, cable TV companies, and wireless and satellite carriers.

- The group provides end-to-end solutions for transforming its clients' business processes, including integrated customer care with provisioning and network maintenance, creating and supporting the deployment of interactive multimedia services, and streamlining overall enterprise management.

Project examples include the following:

- Helping to implement state-of-the-art customer care and billing systems for Deutsche Telekom AG

- Developing information technology strategy for Telecom Italia based on its company business strategy

- Assisting in deploying planned broadband interactive multimedia services for Hongkong Telecom IMS Ltd.

- Implementing SAP R/3 and providing reengineering services for Telephone and Data Systems

- Jointly developing a complete, UNIX-based billing and customer care system with Pacific Bell geared to communications companies that wish to offer broadband and narrowband services to businesses as well as consumers

- A seven-year, $30 million contract with American Mobile Satellite Corp. (AMSC) to develop and operate billing and business information software systems for the satellite-based network AMSC is building for mobile communications

Government

The Government Industry practice increased its revenues by 17% during 1995 to $396 million. Growth was attributed to: an increasing number of government agencies undertaking large-scale transformation to achieve more effective service delivery; government agencies embracing more creative, value-based relationships with consultants; and Andersen Consulting sharing its best public- and private-sector solutions with clients worldwide.

Andersen Consulting assists national, state, provincial, and local government agencies around the world, focusing on several key segments: taxation, human services, public safety, defense, postal services, and finance/administration.

Project examples include the following:

- A $3 million contract to help administer the New Mexico Lottery using Andersen Consulting's Comprehensive Lottery Accounting and Information System (ACCLAIMS). This marks the twelfth lottery engagement in the U.S. and the eighth project that uses ACCLAIMS. Other states operating ACCLAIMS include Idaho, Indiana, Kansas, Kentucky, South Dakota, Minnesota, and Virginia.

- Jointly developing an automated contract information system with the City of Philadelphia. The system manages the city's

© INPUT 1996. Reproduction prohibited.

more than 2,000 professional services contracts.

- Developing the Police Operations Support (POS) system for the Norwegian Police Force
- Codeveloping a new 911 emergency system for the Phoenix Police Department
- Providing support services for the Department of the Treasury under the Internal Revenue Service's Treasury Information Processing Support Services procurement. Awarded in July 1995, Andersen Consulting is eligible to provide up to $200 million in professional consulting services over the next five years.
- Developing an integrated tax administration system for North Carolina's Department of Revenue to improve service to taxpayers and increase revenues
- Working with Montana's Department of Revenue to identify new ways to consolidate the department's wage and tax reporting functions
- Designing, building, and operating a National Insurance Recording Service under the U.K.'s Private Finance Initiative to manage the lifetime contributions made by U.K. citizens to finance social security programs
- A five-year outsourcing contract with the Department of Planning and Development for the Government of Victoria (Australia)
- Implementing child support enforcement systems in Arizona, Wyoming, Tennessee, and Texas
- Redesigning business processes to improve the quality of service delivery in the Province of New Brunswick, Canada
- Working with The Joint Logistics Systems Center to streamline management of material, depots, and logistics across all components of the U.S. Department of Defense
- Developing a state-of-the-art aircraft maintenance management system for the Australian Defense Force

Utilities

The Utilities Industry practice grew 25% during 1995 to $282 million. Andersen Consulting's Utilities Industry practice consists of more than 2,500 professionals worldwide providing clients with products and services that support all functional areas.

Working on more than 175 utilities projects annually, the Utilities Industry practice provides expertise in the areas of consumer services, energy delivery, energy management/marketing and trading, power generation/production, corporate services, and enterprise transformation/thought leadership.

Project examples include the following:

- Customizing and installing the CUSTOMER/1® cooperative customer service system for the Southern Company's five operating companies
- Developing and installing a customer information system for Florida Power which serves some 1.4 million customers, using Andersen Consulting's FOUNDATION application development tools
- Creating Connect 2020, a strategic partnership between Andersen Consulting and Thames Water (U.K.) to provide supply chain management and logistics expertise, initially for Thames Water, as well as for other utilities

© INPUT 1996. Reproduction prohibited.

- Developing and installing a client/server customer service system for Northern States Power, supporting some 1.8 million customers

In January 1996, Andersen Consulting announced that a prototype had been developed linking its CUSTOMER/1® customer information system with AT&T's Integrated Broadband Utility Solution. The move is a step toward a fully integrated solution for the utility industry to aid in providing value-added services like home security, electronic billing, real-time pricing, and other energy management services to customers.

Andersen Consulting established SolutionWorks®, a solutions center that develops and showcases the latest in utilities industry technology in St. Petersburg (FL). The Southern Company customer information system is being developed at SolutionWorks.

Healthcare

The Healthcare Industry practice recorded worldwide 1995 revenue of $125 million, a 29% increase over 1994 revenue of $97 million. With more than 1,500 health care-specific professionals in the Americas, Europe, Australia, and Asia, the practice currently serves more than 100 major clients throughout the world.

Andersen Consulting's vision for the evolving global health care industry recognizes the key driving forces, the resulting discontinuities, and what winning health enterprises must do to be successful. The practice has made several investments to support this industry vision. These include a redesign of the Health Strategy Center in the Dallas Informart and the fall 1996 opening of the Asia-Pacific Health Strategy Center. Additionally, the practice hosts an annual Health Management Conference that attracts executives from all sectors of the global managed-care industry and will publish two industry-specific books, *Prescription for the Future* and *Changing Health Care,* during 1996.

Contract examples include the following:

- Providing ongoing support, including operation of the production and development environment and a full-time help desk for Health Net's Health Net COMP•24, a new medical management program for workers' compensation
- A three-year extension to continue work with the National Marrow Donor Program, including application support to maintain the Search Tracking and Reporting System
- Developing a regional health information network for the Akershus County Health Administration near Oslo (Norway)
- Andersen Consulting is working with FHP to create and implement a strategic approach to technology that will enable better ways of getting information to the people or organizations that need it.

Business Integration Centers

Andersen Consulting's Business Integration Centers (BICs) are examples of how the firm's industry markets package the firm's best practices and showcase business integration solutions.

- The BICs are specifically designed working environments in which senior executives can explore and shape solutions for their companies.
- Each BIC is a workshop for challenging executives to develop creative solutions to industry-specific challenges ranging from health care to retailing. Each is developed

© INPUT 1996. Reproduction prohibited.

and funded by an Andersen Consulting industry market.

- Executives benefit not only from seeing the latest developments and thinking in a particular industry, but also by seeing how they can make significant improvements to their business by integrating its operations, people, and technology with strategies.

- The centers host hundreds of leading executive teams each year. The scope of a visit can be a broad strategic visioning effort, or a focused working session on a topic or issue. Regardless of scope, Andersen Consulting's goal is to show how a strategic vision provides real payback when integrated with advanced management techniques and technology.

The centers are used in these ways:

- *Industry Vision*—to demonstrate to executives leading-edge solutions for issues confronting their industry

- *Hands-on Workshops*—to develop solutions for clients outside the constraints of their own working environment

- *Education/Training*—to educate and train Andersen Consulting's employees and clients

- *Applied Research*—to gain a deeper knowledge of leading technologies and management techniques. Also, to creatively apply innovative ideas and these new technologies in a proof-of-concept environment.

Business Integration Centers are as follows:

Located in Chicago, SMART STORE, an evolving research and development center, demonstrates how current and future trends can enable companies to achieve competitive advantage through the exploration of new, consumer-led strategies.

- The latest rendition of SMART STORE now offers industry executives two different workshops that focus on delivering value to the consumer and practical implementation of supply-side and demand-side processes.

- In London (England), SMART STORE Europe is Andersen Consulting's evolving research and development center dedicated to European retailers, distributors, and manufacturers. The facility makes use of an extensive demonstration area to bring to life a range of industry challenges and a model of future best practices in retailing, distribution, and manufacturing.

- In Sydney (Australia), SMART STORE Asia-Pacific offers the newest approaches to manufacturing, wholesaling, and retailing for food and packaged goods industry organizations in the Asia-Pacific region. As an evolving research and development center, SMART STORE Asia-Pacific demonstrates how packaged goods retailers and manufacturers can reengineer their businesses around the needs and wants of consumers, thus adding value to the consumer shopping experience.

In Atlanta, Logistics 20•20 focuses on the concept of demand chain management, highlighting the impact of logistics on components of the demand chain. Visiting executives experience the most advanced management techniques for logistics and can explore new ideas and solutions for their own companies. The scope of a visit can be as

© INPUT 1996. Reproduction prohibited.

broad as strategies for the entire demand chain, or as focused as radio frequency technologies for the warehouse. By being product-neutral, Logistics 20•20 allows companies from a variety of industries to see these concepts applied to their situation. Visitors come away with a logistics vision for the future of their industry and a vision of how they can create a competitive advantage for themselves.

Also in Atlanta, Process 20•20™ is a forum for clients to learn new ideas and try new approaches for the process manufacturing industry. The center allows executives an opportunity to explore specific issues ranging from global integrated demand chains and enterprise management to product and process development and customer relationship management. At Process 20•20, clients can also participate in DAVINCI, which is Andersen Consulting's virtual organization. Clients will discover how a virtual chemical company can successfully solve technology licensing problems while redesigning a plant.

In Dallas, the Health Strategy Center provides a setting that lays a foundation to guide, inspire, and ultimately provoke discussion about the processes, choices and underlying technologies within the health industry. The center is a forum where industry providers, insurers, managed-care organizations and suppliers can craft practical strategies for succeeding in an increasingly competitive environment. Visiting executives experience the center in interactive workshops designed to stimulate new ideas and explore new opportunities. Within the Health Strategy Center, the best thinking of industry leaders is shared and examined.

In Chicago, The Retail Place focuses on retailers' need to differentiate themselves from competitors by defining who they are, to whom they market, and through which channels they reach that market. Through tailored workshops, the center offers an integrated approach to defining a retailer's strategy, focusing on customer satisfaction and perception, cost reduction, and competitor differentiation.

In Chicago, ENTERPRISE 2020 is dedicated to helping manufacturers of complex products. Visiting executives can examine the present and journey into the future, generating an awareness of the "state of the possible" and how to achieve it.

- ENTERPRISE 2020 accommodates the specific needs of the automotive and electronics industries, as well as the aerospace and defense, industrial equipment, and consumer durables industries. The experience helps companies understand the market forces that impact their business, identify solutions, and visualize the specific ways that their organizations can effectively respond.

- The center is equipped to address a range of issues, from the boardroom to the shop floor. Visitors will leave ENTERPRISE 2020 with a better understanding of how they might change to improve their performance both today and in the future.

Located in Houston, Oil 20•20 provides oil industry executives with a forum in which to explore business challenges as well as evaluate Andersen Consulting point systems and software solutions. These include IS-OIL, a packaged system that provides the benefits of SAP R/3 integrated software with the extended functionality to meet the complex needs of upstream and downstream oil companies; Intelligent Plant Systems (TIPS), a system for cost-effective gas plant accounting; and The Oilfield Workstation (TOW), a

© INPUT 1996. Reproduction prohibited.

production accounting system that enables exploration and production companies to maintain accurate and timely production data while decreasing paperwork. The London Energy Forum and Singapore sites offer similar environments and opportunities.

The newest Business Integration Center, the Financial Ideas Exchange in New York, provides a facility at which financial services organizations can address some of the drivers for change in an increasingly competitive industry.

- The convergence of the different industry sectors, retail banking, insurance, and financial markets forces executives in these organizations to reassess traditional assumptions regarding ways of doing business.

- The Exchange brings to life the need for agility in delivering new products and services to increasingly sophisticated customers. It helps executive teams to visualize possible futures and then to consider some of the implications for change to their organization. The combination of real-world examples, industry models, and best practices helps clients to define a unique franchise based on their individual strengths.

Clients

A sample of clients by industry practice is summarized in Exhibit C.

Marketing and Sales

Historically, Andersen Consulting's primary "sales force" has been its worldwide network of partners. To bolster this partner selling model, Andersen Consulting has established a network of marketing and communications professionals organized on a worldwide, industry, and geographic basis.

- The function is managed by Jim Murphy, president, Murphy & Co. Jim is Andersen Consulting's worldwide managing director for Marketing & Communications. Under Jim Murphy's leadership, the firm has focused its investments on integrated marketing—that is, investing in marketing initiatives aimed at building long-term partnering relationships with targeted accounts in various industry segments.

- As part of its global marketing efforts in 1995, Andersen Consulting successfully completed its inaugural Andersen Consulting World Championship of Golf, a forum that offers the firm unprecedented opportunities to promote its brand via client involvement and advertising. The Andersen Consulting World Championship of Golf is the first such event to be sanctioned by all major golf oversight groups around the world (e.g., U.S PGA TOUR, Japan PGA Tour, etc.).

Alliances

Andersen Consulting's alliance program maintains a portfolio of global, geographic, and industry relationships with solution and technology providers.

- These alliances contribute to much closer and more productive working relationships with key vendors, enabling improved client responsiveness and improving the speed and quality of solution delivery.

- Andersen Consulting global alliances include companies such as SAP, Hewlett-Packard, Sun, Oracle, and PeopleSoft.

© INPUT 1996 Reproduction prohibited.

Exhibit C

Andersen Consulting's Industry Practices Key Clients

Industry Practice/Clients	Industry Practice/Clients	Industry Practice/Clients
Communications	**Financial Services**	Merced County Human Services Agency (CA)
Ameritech	Aetna Life	Ministry of Labor and Social Security (Spain)
AT&T	Allstate Insurance Co.	New South Wales Police Department
Bell Atlantic	American Express	New Zealand Inland Revenue Dept.
BellSouth	American Insurance Services Group	North Carolina Department of Revenue
BT	Australian Mutual Provident Society	Ohio Bureaus of Worker's Compensation
DBP Telecom	Banc One	Phoenix Police Department
Deutsche Telekom	Barclays Bank	Postal Banking Bureau of Japan
France Telecom	CIGNA	Prince George's County (MD)
GTE	Deutsche Terminborse	Province of New Brunswick, Canada
Hongkong Telecom	Eagle Star (U.K.)	State of Texas
McCaw Communications	Fleet Mortgage Group	Tennessee Department of Corrections
MCI	Hong Kong Stock Exchange	U.K. Department of Social Security
Mercury/Cable & Wireless	IDS	U.S. Department of Commerce
Norwegian Telecom	John Hancock Financial Services	U.S. Department of Defense
NTT	J.P. Morgan	**Consumer Products**
NYNEX	London Stock Exchange	Air Canada
Pacific Bell	Mortgage Guaranty Insurance	American President Cos. Ltd.
Southwestern Bell	Nationwide Building Society	Astra Merck
Sprint	NTT Leasing	British Railways Board
Telecom NZ	Prudential Insurance Companies (U.S.)	Brussels Airport Terminal Co.
Telefonica de Espana	SCOR	Coles Meyer (Australia)
Telephone and Data Systems	United States Fidelity and Guarantee Corp. (USF&G)	Continental Airlines Corp.
Telstra Australia	USAA	Damark
Time Warner Cable	Various Blue Cross/Blue Shield Organizations	Delta Air Lines, Inc.
U S WEST		Deutsche Bahn AG
Healthcare	**Government**	Eli Lilly and Company
Akershus County Hospitals (Norway)	Australian Department of Immigration and Ethnic Affairs	Hoechst
FHP International	Canada Post	Holiday Inn Worldwide
Group Health Cooperative	Comune di Milano	ICA Handlarnas AB (Sweden)
Harvard Community Health Plan	Deutsche Bundespost	LA Rinascente (Italy)
Health Alliance Plan	French Army	Japan Railway Tokai
HealthNet HSI	Department of Defense, Australia	
Kaiser Permanente of Northern California	Gov. of Victoria (Australia)	
National Marrow Donor Program	Inland Revenue Authority of Singapore	
St. Vincent's Hospital (Melbourne)	Kowloon-Canton Railway Corp.	
The Wellness Plan	Mass. Department of Revenue	

(continued)

© INPUT 1996. Reproduction prohibited.

Exhibit C
(cont.)
Andersen Consulting's Industry Practices
Key Clients

Industry Practice/Clients	Industry Practice/Clients	Industry Practice/Clients
Consumer Products (cont.)	Microsoft	**Utilities**
Lufthansa German Airlines	Mitsubishi Caterpillar Forklift	Baltimore Gas & Electric
Marriott Corp.	Motorola	Brooklyn Union Gas
Pfizer	NEC Technologies	Carolina Power & Light
Philip Morris	Nissan Motor Corporation, USA	C.E.Z.
Pillsbury	Packard Bell	Connecticut Natural Gas
Portnet	Pirelli SpA	Consumers Power Company
Revlon, Inc.	Polaroid	EDF (France)
Saks Fifth Avenue	Samsung Electronics	ENEL (Italy)
Sandoz Pharmaceuticals	Sharp	ERZ (Madrid)
Scandinavian Airlines	Siemens	Florida Power Corporation
Sea-Land Service, Inc.	Sony	Fujian Providence Electric Power Bureau
Sears, Roebuck & Company	Sun Microsystems	Kyushu Electric Power Co.
ShopKo Stores Inc.	Texas Instruments	National Power (U.K.)
SmithKline Beecham		Osaka Gas (Tokyo)
SNCF (French National Airway)	**Process/Energy**	Pacific Gas & Electric
Unilever	AGIP	Singapore Power
United Parcel Service	Amoco	Slovakia Gas
U.S. Air Group Inc.	BP Exploration Operating Company Limited (BPX)	The Southern Company
Yellow Freight System	British Petroleum	Texas Utilities
Yves Rocher	Ciba-Geigy	Thames Water (U.K.)
	Diacel	UtiliCorp United
Industrial Products	Dow Chemical Company	Verbundnetz Gas AG (Germany)
Apple Computer	DuPont/Conoco	
Autodesk	Freeport-McMoRan, Inc.	
The Boeing Company	The Geon Company	
Caterpillar	Georgia-Pacific Corporation	
Chrysler Corporation	Halliburton Company	
Compaq	Hempel Paints	
Digital Equipment Corporation	Koa Oil Company	
Fiat SpA	Neste Oil	
Ford Motor Company	PETROBRAS	
General Motors Corporation	PETRONAS	
Harley-Davidson Motor Company	Praxair	
Hewlett-Packard	Quantum Chemical	
ITT	Scott Paper	
International Rectifier	Shell Oil Company	
LSI Logic	Statoil Norge AS	
LTV Corporation	Sun Company	
Mabuchi Motor	YPF S.A. (Argentina)	
Mazda		

© INPUT 1996. Reproduction prohibited.

- Andersen Consulting Americas alliances include companies such as Bay Networks, Cabletron, Digital, FileNet, IBM, Informix, Plexus, Recognition International, Sybase, Tandem, and Viewstar.

In February 1995, Andersen Consulting and SAP AG announced that they would partner with several oil companies for the redevelopment of the R/2 (mainframe) downstream IS-OIL product onto an R/3 (client/server) platform.

Andersen Consulting is a member of Oracle's Interactive Multimedia Initiative and its Co-Operative Services Initiative. Andersen has established several Oracle Centers of Expertise around the globe. The two companies are working together to deliver several industry-specific solutions to the market. Oracle training environments have been established in numerous Andersen offices to satisfy the demand for Oracle-trained resources.

Andersen Consulting moves into the seventh year of a relationship with Hewlett-Packard. The relationship has yielded a number of joint market initiatives and solutions for a variety of industry and functional segments that are available on a global basis.

Andersen Consulting has several agreements with PeopleSoft.

- In 1994, Andersen Consulting and PeopleSoft agreed to jointly market and deliver financial and human resource client/server software to public sector organizations in North America. In January 1995, Public Sector Financials, the first public sector product codeveloped by Andersen Consulting and PeopleSoft, was released. Andersen Consulting has exclusive integrator rights to these administrative solutions and is establishing a solution center dedicated to PeopleSoft.

- In May 1995, Andersen Consulting formed an alliance based on PeopleSoft's manufacturing products for the discrete manufacturing market. As a result, nearly 1,000 Andersen customers may migrate from Andersen's AS/400-based MAC-PAC OPEN software product to PeopleSoft's open client/server manufacturing product line.

Andersen Consulting is also exclusively remarketing the Integrated Billing and Customer Care System (IBCCS) developed with Pacific Bell to other communications providers.

Andersen Consulting's SAP Business Organization provides personnel skilled in implementing SAP's R/2 and R/3 products.

- The organization is staffed with 3,000 SAP dedicated consultants who have been trained at Andersen Consulting's Center for Professional Development in St. Charles (IL). More than 400 hours of formal SAP-specific training is available.

- Features of the organization include a comprehensive training program; SAP Solution Centers: and Industry Centers of Expertise (ICOE) staffed with professionals who have SAP R/2, R/3, and business integration skills.

- Areas of expertise include consumer packaged goods, utilities, high technology/electronics, process manufacturing/chemicals, and automotive.

- SMART BRANDS, introduced by Andersen Consulting in 1995, is a consumer packaged goods industry solution designed to enable clients to obtain the business benefits of SAP R/3 implementations more quickly.

© INPUT 1996. Reproduction prohibited.

- U.S. Solution Centers are in Chicago (IL), Cincinnati (OH), Dallas and Houston (TX), Midland (MI), Palo Alto (CA), and Philadelphia (PA). International centers are in Mexico City, São Paulo, Toronto, Frankfurt, London, Tokyo, Manila, Singapore, and Antwerp.

- Andersen Consulting is a charter member of SAP's R/3 Global Consulting Partner Alliance Program and a preferred SAP Business Integration Partner.

- Andersen Consulting received SAP's Award of Excellence for customer service in 1994 and 1995.

Competition

Andersen Consulting's major competitors include Electronic Data Systems, IBM, Computer Sciences Corporation, and SHL Systemhouse.

INPUT Assessment

Andersen Consulting's major strengths include:

- Industry vision and skills

- Global presence and network

- Full-service capability, particularly in strategy and change management

- Business integration vision

- Ability to handle very large, complex projects

Major challenges over the coming year include:

- Continuing to meet the client demand for the many skills required of a full-services player

- Managing the growth of the global network of 38,000 persons

- Efficiently reusing knowledge capital for multiple clients

© INPUT 1996. Reproduction prohibited.

IT2000

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

May 1995

Andersen Consulting

Managing Partner: George T. Shaheen
69 West Washington Street
Chicago, IL 60602
Phone: (312) 372-7100
Fax: (312) 507-2548

ANDERSEN CONSULTING
ARTHUR ANDERSEN & CO, S.C.

Status:	Partnership
Total Consultants:	27,563 (12/94)
Total Personnel:	32,711 (12/94)
Revenue:	$3.45 billion
Calendar Year End:	12/31/94

Key Points

- Andersen Consulting uses its business integration approach—aligning an enterprise's strategy with its technology, people and business processes—to achieve best business performance for its clients.
- During 1994, Andersen formally reorganized its U.S. practice from a regional structure to an industry-oriented structure. Andersen has 50 offices in the U.S. and, while it has a strong presence in all the major local markets, the company wanted to ensure a strong sharing of industry experts and industry best practices across offices. All personnel in U.S. offices are organized by Andersen's major industry programs—Communications, Government, Healthcare, Utilities, Financial Services and Products.
- These types of changes are occurring across Andersen's global organizations as the company seeks to deliver best practices throughout its distribution channels—its industry programs.
- In Europe/Middle East/Africa/India, Andersen's European practice changed its own structure to de-emphasize national practice boundaries within countries. Europe now delivers its services through a combination of industries and three regions—Maritime, West Europe and South Europe. This has helped Andersen facilitate the transfer of best practices across borders and markets to better service its clients.

© INPUT 1995 Reproduction prohibited

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

- In the Asia/Pacific, 1994 Andersen opened up its business in China and expanded personnel from a small number of persons to more than 35.

- Andersen has formally organized its competencies under a worldwide managing partner, strengthening the global synergy among the competencies and Business Process Management service offerings.

- During 1994, Andersen strengthened its technology delivery by aligning various technology responsibilities more closely to the practice areas where they can add value. For example, to take advantage of the close synergy between industry programs and products, Andersen organized packaged knowledge (e.g. FOUNDATION) under its worldwide industry management. In addition, Andersen formally organized its Technology competency—which includes research and development and technology visioning—under its Business Integration management in order to strengthen the tie between Technology and Andersen's other competencies.

- During 1994, Andersen also formally established its Process competency whose purpose is to ensure that Andersen Consulting delivers cross-industry expertise in business functions.

Company Description

Andersen Consulting is a global management and technology consulting organization whose mission is to help its clients change to be more successful. The organization works with clients from a range of industries to link their people, processes and technologies to their strategies. Services provided include a range of professional, systems integration and outsourcing services.

Andersen delivers its management and consulting services through its industry practices, the sources of its best practices consulting knowledge.

- Andersen Consulting builds client relations by industry, initiates thought leadership, such as its annual Customer Contact Forum for the Communications industry, and delivers best practices through initiatives such as Business Integration Centers (BICs), described later in this document.

- Andersen Consulting's industry practices include Process/Energy, Industrial Products, Consumer Products, Communications (formerly the Telecom Industry Group), Government, Financial Services, Healthcare and Utilities.

Andersen has four competences— Process, Change Management, Strategic Services and Technology—to offer solutions that combine services ranging from Reengineering to Business Process Management.

Company Strategy

Andersen Consulting's vision is "to be the global firm committed to quality by having the best people with knowledge capital, partnering with the best clients to deliver value."

As a by-product of its vision, Andersen Consulting emphasizes "partnering" and "delivering value."

- Partnering is part of a trend to "consult with" not "consult to" clients. In order to help a client effect complex change, Andersen Consulting believes that the consultant needs to be far more closely involved with the client. This means building joint teams side-by-side, transferring knowledge, and assuming an implementation role as well as an advisory role.

- Delivering value, according to Andersen Consulting's 1994 annual report, means an emphasis on linking the results of change initiatives to long-term client success as defined by measurable outcomes, such as increased profitability and shareholder wealth (as opposed to emphasizing the processes and tasks required to deliver a solution). As a consequence, according to Andersen Consulting, "a focus on adding value rules out working on limited projects that may or may not relate to a client's strategic mission. Instead, adding value calls for working with a client as a long-term

© INPUT 1995 Reproduction prohibited.

business partner to genuinely create a far more successful enterprise."

- Also as a consequence, Andersen Consulting is changed to apply best thinking, the best talent and creative pricing solutions (such as value-billing) to meet clients' complex needs. This approach is reflected in its emphasis on packaged knowledge solutions, such as Business Integration Centers, that capture best practices for clients.

- In 1994, Andersen Consulting formalized a value-delivery framework—Quality/Value/Success. According to Andersen Consulting, "this framework provides partners a structured approach to help determine the client's expectations—in terms of specific delivered results."

Andersen Consulting goes to market via its industry practices, applying in-depth industry knowledge and experience to make the application of its competencies relevant to its clients'specific needs. During 1994, Andersen implemented several key initiatives to strengthen its industry practices.

- The company's reorganization intensifies the focus of all its professionals on delivering value, industry by industry.

- More of Andersen's training is oriented around industry issues and solutions.

- Andersen continues to open new industry-focused Business Integration Centers to help clients visualize how they can change to be more successful.

Andersen Consulting's client service model for delivering solutions is "business integration"—the linkage of core business components. For change to work, it must be in sync with an organization's people, processes, strategy and technology.

Andersen Consulting remains fully committed to the reengineering market as demonstrated by such initiatives as its internal training workshops and its Value Driven Re/Engineering Workbench, an engagement tool that helps clients combine corporate vision with business processes. The organization estimates that nearly $1 billion of its 1994 revenue was attributed to reengineering work.

Andersen Consulting is committed to meeting the transnational needs of clients, operating as a global partnership through an international network of consultants with national practices in 47 countries.

The organization emphasizes global sharing of best practices through its Knowledge Xchange™ knowledge management system.

Organization and Structure

Andersen Consulting currently serves clients through 152 offices in 47 countries, including 71 offices in the Americas, 63 offices in Europe/Middle East/Afria/India (EMEAI) and 18 offices in Asia/Pacific.

- Andersen Consulting's current organization is summarized in Exhibit A.

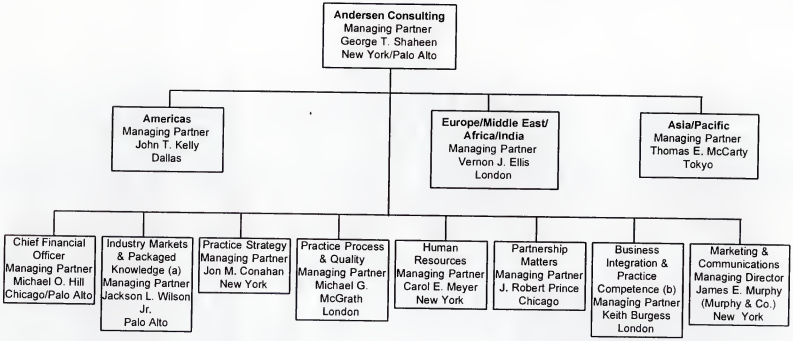
- Andersen Consulting's services and products are offered through its six major industry practices, as outlined in Exhibit B.

- Andersen also has a Quality Leadership Council to help oversee quality initiatives worldwide and a Global Management Council, whose mission is to analyze policy issues, review the organization's strategic direction, and ensure that Andersen Consulting's investments are consistent with that strategic direction.

© INPUT 1995 Reproduction prohibited.

Exhibit A

Andersen Consulting Organizational Structure



(a) Includes Software Products and Andersen Consulting's industry programs--Communications, Financial Services, Government, Healthcare, Products and Utilites

(b) Includes Business Process Management, Change Management, Process, Strategic Services and Technology

© INPUT 1995 Reproduction prohibited.

Exhibit B
Andersen Consulting Industry Practices

Industry Practice	Industry Practice
Products • Consumer Products - Food and consumer packaged goods - Pharmaceuticals - Retail and wholesale distribution - Transportation and travel services • Industrial Products - Aerospace and defense - Electronics - Automotive - Consumer durables - Industrial equipment • Process/Energy - Chemicals - Energy/upstream - Energy/downstream - Natural resources **Communications** • U.S. interexchange carriers • U.S. local exchange carriers • Global carriers • State-owned European and Asian PTTs • Wireless communications providers (PCS/PCN) • Cable companies • Information and service providers • Satellite companies • Multimedia companies **Utilities** • Utilities Industry Practices • Consumer Services • Energy Delivery • Energy Management, Marketing & Trading • Power Generation/Production • Corporate Services • Enterprise Transformation/Thought Leadership **Healthcare** • Integrated healthcare systems • Other providers • Health insurers • Managed care organizations • Policy-making authorities • Purchasers • Suppliers	**Financial Services** • Insurance - Life - Property and casualty - Health and health management - Disability - Reinsurance - Brokerage • Retail Financial Services - Commercial banks - Thrifts - Credit unions - Finance - Leasing • Financial Markets - Investment banking - Brokerage - Exchanges and depositions - Mergers and acquisitions - Swaps - Portfolio management - Equity products - Commodities - Risk management - Securitization - Fixed income - Mortgage - Off-balance sheet products - Investment management **Government** • National, state and local government organizations and departments - Revenue - Health and human services - Labor - Financial management - Administration - Human resources - Retirement - Postal - Defense - Justice/Public Safety - Environment - Education - Transportation - Lotteries

© INPUT 1995 Reproduction prohibited.

Jack Wilson, Managing Partner, Industry Markets and Packaged Knowledge

Andersen Consulting's primary distribution channels are its industries, which are headed by Jack Wilson. He ensures that Andersen Consulting targets the appropriate industries over the long term, invests dollars accordingly and builds experts who can deliver services for industries ranging from industrial products to utilities.

The six global industry managing partners reporting to Jack Wilson include:

- Communications—Al Burgess (Atlanta)
- Financial Services—John Skerritt (New York)
 - Financial Markets—Aram Shishmanian (London)
 - Insurance—Dave Hoffman (Chicago)
 - Retail Financial Services—John Skerritt (New York)
- Government—David Hunter (Sydney)
- Healthcare—David Rey (San Francisco)
- Products—Pete Peterson (Chicago)
 - Consumer Products—Steve Johnson (Chicago)
 - Industrial Products—Carl Kilmer (Boston)
 - Process/Energy—David Crow (Atlanta)
- Utilities—Bob Anclien (Atlanta)

Vernon Ellis, Managing Partner, EMEAI
John Kelly, Managing Partner, Americas
Tom McCarty, Managing Partner, Asia/Pacific

Although Andersen Consulting goes to market through its industries, the company also needs to ensure that it delivers consistent, high-quality service across the world while meeting the needs of clients locally. In order to "think globally, yet act locally," Andersen Consulting has managing partners in charge of its three geographic areas to ensure that its 152 offices in 47 countries are meeting client needs unique to their local markets.

Keith Burgess, Managing Partner, Business Integration and Process Competence

Keith Burgess is in charge of Andersen Consulting's competencies and service offerings—Change Management, Process, Strategic Services, Technology and Business Process Management service offerings. Mr. Burgess examines all of Andersen's services, ensures that the company provides what clients want and that the right people are in place to direct those competencies and service offerings. In addition, he invests dollars accordingly and builds expertise across competencies and service offerings to ensure business integration. Managing partners reporting to Mr. Burgess include:

- Change Management—Terry Neill (London)
- Process—Barry Patmore (Los Angeles)
- Strategic Services—Peter Fuchs (London)
- Technology—Ed Schreck (Chicago)
- Business Process Management—Joellin Comerford (New York)

Jon Conahan, Managing Partner, Practice Strategy

Jon Conahan is George Shaheen's point person for formulating and executing Andersen Consulting's strategic direction. Andersen periodically re-evaluates its lines of businesses and its client needs through initiatives such as Horizon 2000, an initiative undertaken in 1991 that resulted in the creation of Andersen Consulting's vision statement, its Global Management Council and a host of other changes designed to keep the firm attuned to its market. Mr. Conahan is in charge of crystallizing strategy and communicating it to the partners.

© INPUT 1995. Reproduction prohibited.

Mike McGrath, Managing Partner, Practice Process and Quality

Mike McGrath chairs Andersen Consulting's Quality Management Council. Essentially his job is to ensure that Andersen Consulting always builds quality into its work, that methodologies are sound and that the company has a system for total quality improvement. Andersen's chief information officer, Charlie Paulk (Chicago) reports to Mr. McGrath.

Other Senior Executives

Carol Meyer directs internal human resources policies. Bob Prince directs partnership matters. John Smith (Chicago) directs internal training and reports to Bob Prince. Jim Murphy directs all of Andersen Consulting's marketing efforts and reports to George Shaheen.

Business Integration Centers

Andersen Consulting's Business Integration Centers (BICs) are specifically designed working environments where senior executives can explore and shape solutions for their companies.

- Executives not only benefit from seeing the latest developments and thinking in a particular industry, but also see how they can make significant improvements to their business by integrating business strategies with operations, people and technology.

- The centers host hundreds of leading executive teams each year. The scope of a visit can be a broad strategic visioning effort, or a focused working session on a topic or issue. Regardless of scope, Andersen Consulting's goal is to show how a strategic vision provides real payback when integrated with advanced management techniques and technology on the market today.

The centers are used in these ways:

- *Industry Vision*—to demonstrate to executives leading-edge solutions for issues confronting their industry

- *Hands-on Workshops*—to develop solutions for clients outside the contraints of their own working environment

- *Education/Training*—to educate and train Andersen Consulting's employees and clients

- *Applied Research*—to gain a deeper knowledge of leading technologies and management techniques. Also, to creatively apply innovative ideas and these new technologies in a proof-of-concept environment

Business Integration Centers are as follows:

Located in Chicago, SMART STORE, an evolving research and development center, demonstrates how food and consumer packaged goods retailers, manufacturers, wholesalers and brokers need to work together to focus their strategies on the ultimate source of power—the consumer.

- The latest rendition of SMART STORE—SMART STORE Act II—is built around six strategies that help retailers, manufacturers and wholesalers meet the needs of the consumers and breakaway from the current problem of marketplace saturation—too many stores, too many products and redundant distribution processes.

- In Windsor, Bershire (England), SMART STORE Europe is Andersen Consulting's evolving research and development center, dedicated to European retailers, distributors and manufacturers. The facility makes use of an extensive demonstration area to bring to life a range of industry challenges and a model of future best practices in retailing, distribution and manufacturing. It also shows how the integration of business processes, people and technology can support a strategy that delivers greater value and choice to the consumer.

© INPUT 1995 Reproduction prohibited.

- In Lidcombe, New South Wales (Australia), SMART STORE Asia-Pacific offers the newest approaches to manufacturing, wholesaling and retailing for food and packaged goods industry organizations in the Asia-Pacific region. As an evolving research and development center, SMART STORE Asia-Pacific demonstrates how packaged goods retailers and manufacturers can reengineer their businesses around the needs and wants of consumers, thus adding value to the consumer shopping experience.

In Atlanta, Logistics 20•20 focuses on the concept of Demand Chain Management, highlighting the impact of logistics on components of the demand chain. Visiting executives experience the most advanced management techniques for logistics and can explore new ideas and solutions for their own companies. The scope of a visit can be as broad as strategies for the entire demand chain, or as focused as radio frequency technologies for the warehouse. Visitors see the entire breadth of the Business Integration model in action. By being product-neutral, Logistics 20•20 allows companies from a variety of industries to see these concepts applied to their situation. Visitors come away with a logistics vision for the future of their industry and a vision of how they can create a competitive advantage themselves.

Also in Atlanta, Process 20•20™ is a forum for demonstrating and discussing best practices and new ideas in the process manufacturing industry. Based on the best thoughts of major research institutes, industry research and the chemical industry itself, the characteristics of a successful process manufacturer were defined and implemented in a real world model. The center allows an opportunity for executives to explore specific issues related to their businesses in a workshop setting, ranging from global integrated demand chains and enterprise management, to product and process development and managing the reengineering journey. At Process 20•20, clients discuss what changes—in strategies, business processes, people and technology—would improve their ability to succeed as well as how to implement those changes.

In Dallas, the Health Strategy Center, a vision of tomorrow's health services community, shows how new approaches to care delivery and management can help enhance quality and contain costs. Using realistic recreations of various health care organizations, Andersen Consulting demonstrates how new business processes and information technology can transform health care and related organizations. The center also addresses cooperative strategies for the entire health services industry—providers, intermediaries, suppliers, buyers and policymakers. Through meaningful, flexible strategies, these entities can come together and transform the entire health experience to streamline processes and improve quality from the point patients access the system, through care delivery and back to payment and review of outcomes.

In Chicago, The Retail Place focuses on retailers' needs to differentiate themselves from competitors by defining who they are, to whom they market and through which channels they reach that market. The center presents the lastest relevant thinking in the retailing industry and is committed to helping retailers effectively meet industry challenges. Through tailored workshops, executives focus on those capabilities that both satisfy their customers and reduce costs.

Opening in Chicago in June 1995, ENTERPRISE 2020 is dedicated to helping manufacturers of complex products. A visit serves as a catalyst that lets visiting executives examine the present and journey into the future, generating an awareness of the "state of the possible" along with how to achieve it.

- ENTERPRISE 2020 accommodates the specific needs of the automotive and electronics industries, as well as the aerospace and defense, industrial equipment and consumer durables industries. The experience helps companies understand the market forces that impact their business, identify solutions and visualize the specific ways that their organizations can effectively respond.

- The center is equipped to address a range of isssues, from the boardroom to the shop floor. Visitors will leave ENTERPRISE 2020 with a better

© INPUT 1995. Reproduction prohibited.

understanding of how they might change to improve their performance both today and in the future.

Citizenlink, operated by Andersen Consulting's Government practice, is a portable public services integration center that focuses on best practices and public service enterprise transformation.

During 1995, Andersen will open the Financial Ideas Exchange, a financial services industry research and development center.

Financials

Andersen Consulting's 1994 revenues reached $3.45 billion, a 20% increase over 1993 revenue of $2.88 billion.

According to Andersen Consulting, the organization's "real" growth—taking out the influence of international exchange rates—was 19% in 1994, compared to 13% in 1993.

Although Andersen Consulting's fiscal year end is August 31, financials are shown for calendar years ending December 31 to conform with common reporting practices. A five-year revenue summary follows:

Andersen Consulting
Five-Year Revenue Summary
($ Millions)

Item	Calendar Year				
	1994	1993	1992	1991	1990
Revenue	$3,452	$2,876	$2,723	$2,341	$2,057
• Percent change from previous year	20%	6%	16%	14%	32%

Revenue growth in 1994 was attributed to the following:

- The U.S. practice, which generates half of Andersen's revenues, posted revenues of $1.74 billion, a 23% increase over 1993.
- Communications, Andersen Consulting's fastest-growing industry practice, grew at 52% to $364 million, up from $239 million for 1993.
- Business reengineering revenues rose 20% in 1994 to $932 million, up from $775 million in 1993 and $700 million in 1992.
- Revenues from client/server engagements rose 31% to $1,933 million, up from $1,470 million in 1993 and $1,080 million in 1992.
- Revenues from object technology engagements reached $78 million in 1994, up 105% from $38 million in 1993.

Andersen Consulting's investment in research and development was approximately $352 million (10% of revenue) in 1994, $328 million (11% of revenue) in 1993 and $286 million (11% of revenue) in 1992.

© INPUT 1995 Reproduction prohibited.

Revenue Analysis by Product/Service

INPUT estimates Andersen Consulting's worldwide 1994 revenue was derived approximately as follows:

Systems integration	56%
Professional services	30%
Outsoureing services	9%
Software products	5%
	100%

INPUT estimates approximately 52% of Andersen Consulting's $1.74 billion in U.S. 1994 revenue was derived from systems integration, 33% from professional services, 10% from outsoureing services and 5% from software products.

Market Financials

A three-year summary of worldwide revenue by industry market, as provided by Andersen Consulting, follows:

Andersen Consulting
Three-Year Source of Revenue Summary
($ Millions)

	Calendar Year					
	1994		1993		1992	
Industry Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Products						
- Consumer Products	$752	22%	$615	21%	$510	19%
- Industrial Products	318	9%	307	11%	336	12%
- Process Mfg./Energy	310	9%	290	10%	277	10%
	$1,380	40%	$1,212	42%	$1,123	41%
Financial Services						
- Retail Financial Services	$434	13%	$301	10%	$295	11%
- Financial Markets	322	9%	245	9%	237	9%
- Insurance	218	6%	169	6%	140	5%
	$974	28%	$715	25%	$672	25%
Communications	364	11%	239	8%	192	7%
Government	339	10%	303	11%	288	11%
Utilities	225	6%	232	8%	261	9%
Healthcare	97	3%	82	3%	77	3%
Other	73	2%	93	3%	110	4%
Total	$3,452	100%	$2,876	100%	$2,723	100%

Geographic Markets

Approximately $1.74 billion (50%) of Andersen Consulting's 1994 revenue was derived from the U.S., a 23% increase over 1993 U.S. revenues of approximately $1.41 billion.

Approximately 56% of Andersen Consulting's 1994 revenue was derived from the Americas, 34% from Europe/Middle East/Africa/India (EMEAI) and the remaining 10% from the Asia/Pacific.

A three-year summary of source of revenue by geographic region, as provided by Andersen Consulting, is shown below.

© INPUT 1995 Reproduction prohibited.

Also shown is a summary that segments 1994 source of revenue for each of Andersen Consulting's three geographic regions by industry practice

Andersen Consulting
Three-Year Geographic Source of Revenue Summary
($ Millions)

	Calendar Year					
	1994		1993		1992	
Geographic Market	Revenue $	Percent of Total	Revenue $	Percent of Total	Revenue $	Percent of Total
Americas	$1,941	56%	$1,574	55%	$1,383	51%
EMEAI	1,181	34%	1,043	36%	1,131	41%
Asia/Pacific	330	10%	259	9%	209	8%
Total	$3,452	100%	$2,876	100%	$2,723	100%

Andersen Consulting
1994 Geographic Source of Revenue by Industry Practice
($ Millions)

	Geographic Region		
Industry Practice	Americas	EMEAI	Asia/Pacific
Products	45%	35%	32%
Financial Services	22%	37%	33%
Communications	13%	5%	15%
Government	10%	10%	11%
Utilities	5%	9%	4%
Healthcare	4%	1%	1%
Other	1%	3%	4%
Total Revenue	100%	100%	100%

Acquisitions

In February 1995, Andersen Consulting acquired The Hampton Group, a leading strategic and operation consulting firm for trust, investment services, securities and brokerage organizations.

- The Hampton Group, based in New York (NY) with a staff of 10, provides a range of services, including strategic business planning, marketing and sales strategy development and technology-enabled business process design.
- The acquisition will enhance Andersen Consulting's ability to serve its financial services clients, including banks that offer trust and investment products and services, and pursue new opportunities as financial services companies confront market change.

© INPUT 1995 Reproduction prohibited.

- The Hampton Group will retain its name and continue its current industry focus. The group will operate under the direction of Michael J. May, managing partner of Andersen Consulting's Strategic Services practice for the financial services industry.

Education

During 1994, Andersen Consulting invested a total of $205 million (6% of revenue) on education, with a total of nearly 3.4 million training hours, covering 700 central training courses. During the year, there were 7,112 client/server trainees and 843 object technology trainees.

Andersen Consulting has recently initiated the Career Development Model in support of the company's resolution to deliver the full value of business integration.

- This model realigns recruiting, training, education, career development, advancement options, compensation, structures and counseling for Andersen personnel.

- The emphasis on broader, deeper and more focused skills to accommodate business integration has led to hiring of experienced specialists, particulary in strategy and change management.

- Training courses are more focused on real-life integration cases.

- Andersen's emphasis is on the concept of multidisciplinary teams in a true business integration environment developing solutions to complex business cases.

Interactive multimedia technology is being used on a worldwide basis in local offices and in centralized training. For example, the Business Practice Course is an interactive self-study multimedia training product that teaches new Andersen professionals basic functions through a simulated client engagement.

Through Andersen Consulting Education, more than 700 courses are available to each Andersen Consulting consultant. By the time a consultant reaches the associate partner level, he or she will have received more than 1,000 hours of education.

- The Center for Professional Education, located in St. Charles (IL), is the organization's hub for internal training and has more than 135 classrooms accommodating more than 1,800 participants.

- Other worldwide training locations include Melbourne (Australia), Singapore and Veldhoven (the Netherlands).

- Training also takes place in local offices.

- Following initial training, consultants return to St. Charles approximately every 18 months for additional training.

Employees

As of December 31, 1994, Andersen Consulting had 32,711 personnel worldwide, compared to 29,296 personnel worldwide as of December 31, 1993.

- The total partner count for Andersen Consulting in 1994 was 878 (included in the Consultant category), compared to a total of 846 partners for 1993.

- A breakdown of total employees for 1994 by geographic region and function follows:

© INPUT 1995 Reproduction prohibited.

Exhibit
Andersen Consulting Personnel

Region	Personnel
Americas	
Consultants	14,734
Administrative/Support	2,687
Total Americas	17,421
EMEAI	
Consultants	9,838
Administrative/Support	1,958
Total EMEAI	11,796
Asia/Pacific	
Consultants	2,991
Administrative/Support	503
Total Asia/Pacific	3,494
Total Consultants	27,563
Total Admin/Support	5,148
Total Personnel Worldwide	32,711

Key Services

Andersen Consulting provides a range of professional and systems integration services through a combination of its four competencies—Strategic Services, Change Management, Process and Technology.

Developing full services, primarily from within, is key to Andersen Consulting's approach of partnering—delivering not only advice but also implementation. Andersen Consulting believes that each competency and service offering must be as good or better than a client's next available alternative. But the organization believes that the best value from a client's standpoint is enjoying the use of all the services in combination. On client projects, the competency specialists remain involved throughout the entire client relationship. They work collaboratively and iteratively, adjusting as they go. Work is not handed off from one competency to the next.

Strategic Services—Andersen Consulting believes that transformational change is imperative for survival. Companies don't want management consultants who simply study a problem and write up a report—leaving the clients to fend for themselves as they struggle to turn theory into practical reality. Convinced that most large organizations are overstudied and underimplemented, Andersen Consulting's Strategic Services practice is focused on helping clients chose an appropriate strategic direction and developing and successfully executing a strategic implementation plan.

- Deep industry knowledge, world-class organizational skills and ongoing investments in building knowledge capital enables the Strategic Services practice to devise innovative and break-out-of-the-pack strategies and implementation plans for companies.

- The Strategic Services practice works with leading companies around the world, academic and industry associations an other non-profit organizations. This practice:

 - Has grown sixfold since 1989
 - Has about 900 professionals working around the globe
 - Is among the top five or six largest strategy practices in the world, and one of the fastest growing
 - Has Logistics and Information & Technology Strategy practices that are leaders in their fields
 - Has ongoing research programs in enterprise transformation; supply chain management; banking; packaged goods and numerous other industries; and information and technology strategy

The *Change Management* competency focuses on the people and organization aspects of change to convert client strategies into the improved day-to-day performance and behavior of their people.

- Instead of focusing on change driven by and based on technology, Andersen Consulting takes a higher-level view of an organization and uses analysis of the context and readiness for change as determinants

© INPUT 1995 Reproduction prohibited.

of the activities to be included. Its change management methodology is based on two premises:

- Change is like a journey. There are different types of journeys and different approaches to managing the change will apply.

- Successful change management methodologies focus on both "supply" (or implementation of change) and "demand" (or creation and maintenance of desire for change within the organization).

- Andersen Consulting's Change Management team translates change aspirations at the executive level into new understanding, skills and behavior through all levels of an organization.

- Andersen Consulting has embedded Change Management into its business integration strategy by forging stronger links with the other competencies and by becoming an integral part of industry marketing.

The *Process* competency's mission is to apply process design principles, best practices and information technology to design and implement processes to achieve outcomes that deliver value. The magnitude of process change can range from streamlining to business reengineering to enterprise transformation. Targeted processes include:

- Developing products and services—concurrent, fast-to-market design/engineering

- Generating demand—achieving customer satisfaction with micromarketing, value-added services, market intelligence

- Producing and delivering products and services—reengineering of supply chains, order fulfillment and integration of design and manufacturing

- Managing the enterprise—reengineering support processes such as financial, human resources and information management to make them more responsive to internal customers' needs.

The *Technology* competency is responsible for delivering technology expertise via systems integration to assist clients in expanding business opportunities, creating new markets, as well as rejuvenating existing products.

- Andersen Consulting has demonstrated its commitment to technology through some key initiatives—the opening of the Center for Strategic Technology in Palo Alto (CA); the development of a similar center in Sophia Antipolis, France; and the establishment of a technology park in Northbrook (IL) in late 1995.

- System integration projects may require the design and installation of systems using custom-designed or packaged software, expertise in project management and change management computer-based training.

- The Knowledge Xchange™ knowledge management system is a firmwide communications system that allows Andersen Consulting consultants from around the world to trade ideas and exchange knowledge and experience.

- The company is committed to offering client/server and object technology solutions for its clients.

Business Process Management represents Andersen Consulting's outsourcing services practice, which targets outsourcing of client/server-based information technology operations and other business processes, such as logistics and customer service.

- The Business Process Management practice, with more than 3,500 professionals and 155 clients worldwide, generated an estimated $320 million in revenue during 1994, growing 30% annually for the past three years. It is expected that the practice will reach an estimated $450 million in revenue in 1995, which represents a $1 billion portfolio.

© INPUT 1995 Reproduction prohibited.

- In March 1995, Andersen Consulting signed a letter of intent to form an alliance with GE Capital to pursue opportunities in the U.S. mainframe outsourcing market. Under the alliance, Andersen Consulting will help companies manage and continuously improve their entire IT function while GE Capital will provide mainframe services.

To ensure a seamless approach, experts from various competencies/service offerings deliver solutions through specific industries. Andersen Consulting does not promote itself as a "strategy house" or a "technology firm," but goes to market through its industries, offering the best possible solution for that industry.

- Andersen Consulting's industry practices are wellsprings for its best practices such as reusable software that is packaged and transferred across multiple clients within an industry. An example is Andersen Consulting's CUSTOMER/1, which is a customer service software package that provides support for customer contact and billing functions for electric, gas and water utilities around the world. Moreover, through Andersen Consulting's Industry Markets and Packaged Knowledge area, the firm offers its FOUNDATION suite of client/server and host-based methodologies, application development tools and enablement services to help organizations build high-end departmental and enterprise-wide client/server systems.

- As part of Andersen Consulting, FOUNDATION delivers market-enabled versions of the firm's proven methodology and development tools, which are based on the experience and knowledge gained on thousands of development projects each year.

- Andersen Consulting's advanced development initiative, Project Eagle, provides a new capability for software development based on various advanced concepts, including distributed object computing, Integrated Performance Support, advanced usability and tailorability.

The following discussion summarizes Andersen Consulting's services by industry practice.

Products Industry Practice

The Products Industry practice is composed of three major segments—Consumer, Industrial and Process/Energy. Overall revenues reached $1.38 billion in 1994, a 14% increase over $1.2 billion in 1993.

The Consumer Products segment achieved a 22% revenue increase in 1994 to $752 million. Business Integration Centers continue to help stimulate strong sales in the food and consumer packaged goods segments, as well as retail and wholesale distribution. The Retail industry practice works with more than 450 clients worldwide representing the apparel manufacturing, general retail and wholesale distribution industries.

Project examples in this segment include:

- Providing consulting and systems integration services to implement an advanced merchandise management system for ShopKo Stores Inc.

- Providing outsourcing services in support of Filene's Basement (an apparel chain) financial, distribution and merchandising applications.

- In the food segment, providing a range of transformational work for Dial (US.), ICA (Sweden), Heinz and Nestle.

- Revamping the financial planning system for Pepsi-Cola International's Latin America Division.

- In the pharmaceutical market, a range of transformational work for Hoechst, Pharmacia, Sandoz and Pfizer.

- In the transportation and travel services segment, Andersen Consulting continues to leverage its work in Passenger Revenue Accounting (PRA) a system orginally developed at Northwest Airlines. By the

© INPUT 1995 Reproduction prohibited.

end of 1994, Andersen was providing PRA to four major airlines.

- For Delta Airlines, providing a range of services, including restructuring and automating Delta's entire finance department.

- In the railroad segment, a range of work for The Atchison,Topeka and Santa Fe Railway Company, JR Tokai and British Rail Board.

The Industrial Products segment recorded 1994 revenue of $318 million, a 4% increase over 1993, due to the resurgence of the automotive market, continued expansion in the electronics sector and general improvement in economic conditions. This is balanced by the sharp decline in investments of this nature in the aerospace and defense sector. Andersen Consulting has established relationships with 9 of the top 10 *Fortune Global 500* automotive companies and with 16 of the top 25 *Fortune Global 500* computer and electronics companies. Project examples in this segment include:

- In the automotive industry, key engagements with industry leaders such as Chrysler, Ford, Nissan, Volkswagen, Harley-Davidson Motor Company and Fiat.

- In the electronics industry, key engagements with companies including Motorola, Microsoft, Hewlett-Packard, Samsung Electronics, NEC Technologies, Alcatel, Olivetti, Sun Microsystems and Apple Computer.

- In the industrial equipment sector, key engagements with companies such as Caterpillar and Mitsubishi Caterpillar Forklift.

- In the consumer durables sector, key engagements with companies such as Johnson Matthey, plc, Stanley Works Inc., and UCAR Carbon Company.

- In the aerospace and defense sector, key engagements with companies such as The Boeing Company and McDonnell Douglas.

The Process/Energy segment achieved a 7% increase in revenue during 1994 to $310 million. Project examples in this segment include the following:

- Reengineering services, software configuration, development and implementation services for Conoco's core business systems.

- A five-year, $89 million contract with British Petroleum Exploration Europe to manage British Petroleum's financial accounting services.

- Providing application maintenance and development services in support of a new client/server environment for Freeport-McMoRan.

- Managing IT applications, including financial and administrative systems and equipment and products operation systems, for Halliburton Energy Systems as part of a 10-year, $500 million contract.

- Partnering with SAP AG and several oil companies for the redevelopment of SAP's successful R/2 (mainframe) downstream IS-Oil product onto an R/3 (client/server) platform. Active participants include Chevron, Crown Central Petroleum, Elf, Mobile, Petrofina, Star Enterprise, Sunoco Canada and Texaco.

- Various projects for Royal Dutch Shell, Italy's AGIP and Spain's Petrogal.

Financial Services

The Financial Services practice—comprising Retail Financial Services, Financial Markets and Insurance—generated 1994 revenue of $974 million, a 36% increase over 1993.

The Retail Financial Services segment generated revenue of $434 million in 1994, up 44% over 1993. Project examples include:

- Providing Postbanken (Norway) with the FOUNDATION client/server application development toolset to build a new customer service system.

© INPUT 1995 Reproduction prohibited.

- Providing custom programming and support services for SEI Corporation's TRUST 3000 product.

- Working with Caja Espana (Spain) to develop retail financial service extensions to FOUNDATION.

- Implementing the TRIUMPH card processing system (developed with Banc One) for Barclaycard (U.K.) and GZS (Germany).

- Providing transformation change/strategic services with Chemical Bank, Wachovia, Bank of America, Great Western Bank and First Bank System.

The Financial Markets reported 1994 revenue of $322 million, a 31% increase over 1993. Much of this segment's work for brokerages and mutual funds calls for reconfiguring their businesses to support global operations. Projects include:

- Providing outsourcing services to run the automated trading floor at the London Stock Exchange.

- Clients include J.P.Morgan, Capital Group and Northern Trust Corporation.

The Insurance segment contributed $218 million in revenue during 1994, up 29% from 1993. Andersen Consulting is working with more than half of the top 50 insurance companies in the world. Projects include:

- Reengineering of key claims processes for Fortis, Inc.

- Development and implementation of new systems, products and organizational structures for Eagle Star (U.K.).

- Building a mission-critical life insurance new business and contract administration system with USAA.

- Reengineering the customer-service processes at John Hancock.

- Support client servicing and risk management applications for Marsh & McLennan.

- Assisting in the reengineering of the underwriting processes for Allstate.

- Effecting wide-scale transformational change for AMP of Australia.

Communications

The Communications Industry practice, Andersen Consulting's fastest-growing practice area, recorded worldwide 1994 revenue of $364 million, a 52% increase over 1993 revenue of $239 million. With more than 3,000 consultants worldwide, the practice services virtually every major telecommunications carrier, providing a spectrum of services ranging from strategic planning to the implementation of customer contact and network operations systems.

Project examples include the following:

- Serving as systems integrator for the Time Warner Cable Full Service Network, deployed in Orlando in late 1994.

- Working with Bell Atlantic to reengineer and redevelop major business processes and systems in both its network and customer contact areas.

- A seven-year, $30 million contract with American Mobile Satellite Corp. (AMSC) to develop and operate billing and business information software systems for the satellite-based network AMSC is building for mobile communications.

- Working with Belgacom to reengineer its provisioning and customer service processes.

- Working with Telstra to reengineer its core systems, including its end-to-end customer contact process.

Government

The Government Industry practice increased its revenues by 12% during 1994. Andersen Consulting

© INPUT 1995 Reproduction prohibited.

assists government agencies around the world, focusing on several key segments—taxation, human services, public safety, defense, postal services and government finance/administration.

Project examples include the following:

- A five-year outsourcing contract with the Department of Planning and Development for the Government of Victoria (Australia).
- Developing an integrated operational police system (COPS) for Australia's New South Wales Police Service.
- Providing reengineering services to taxation agencies in the U.S., New Zealand, Japan, South Korea, Singapore, Puerto Rico and the Philippines.
- Reengineering the State of Texas' child welfare tracking system to provide immediate access to a unified database of casework, court records and provider histories.
- Providing financial managment and procurement-related consulting services to various U.S. government agencies under a contract with the Financial Management Service, a bureau of the Treasury.
- Leading an alliance of technology providers to create an object-oriented approach to software development that promotes reusability and easy modification under a $24.5 million project with the U.S. Department of Defense's Advanced Research Project Agency.
- Designing and implementing a new Financial Management System for the U.S. Department of Commerce.
- Implementing a new statewide computer-aided dispatch system for the California Highway Patrol.

Utilities

The Utilities Industry practice, with worldwide revenue of $225 million, provides reengineering expertise to utilities organizations around the world, including strategic services, systems integration, business process management and change management skills. With more than 2,500 consultants worldwide, Andersen Consulting provides utilities expertise in consumer services; energy delivery; energy management, marketing and trading; power generation/production; corporate services; and enterprise transformation/thought leadership.

Project examples include the following:

- Developing a customer information system for Florida Power using Andersen Consulting's FOUNDATION application development tools.
- Developing an engineering business change plan for North West Water Engineering (U.K.).
- Developing a customer service system for Northern States Power.

Andersen Consulting, in conjunction with Florida Power Corporation, has established SolutionWorks, a joint solutions center that develops and showcases the latest in utilities technology.

Healthcare

The Healthcare Industry practice recorded worldwide 1994 revenue of $97 million, an 18% increase over 1993 revenue of $82 million. With more than 750 healthcare-specific professionals in the Americas, Europe, Australia and Asia, the practice currently serves more than 250 major clients throughout the world.

The Healthcare Industry practice was granted a $4.3 million research award from the Advanced Technology program at the National Institute of Standards and Technology. This award allows the practice to spearhead a two-year research and development effort for a technical architecture that would enable healthcare information systems to take

© INPUT 1995 Reproduction prohibited.

advantage of an emerging national information infrastructure.

Contract examples include the following:

- Providing ongoing support, including operation of the production and development environment and a full-time help desk for Health Net's Health Net COMP•24, a new medical management program for workers' compensation.
- A three-year extension to continue work with the National Marrow Donor Program, including application support to maintain the Search Tracking and Reporting System.
- Developing a regional health information network for Akershus County Health Administration near Oslo (Norway).
- Providing change management services for Blue Cross Blue Shield of Tennessee.

Clients

A sample of clients by industry practice is summarized in Exhibit C.

Marketing and Sales

Historically, Andersen Consulting's primary "salesforce" has been its worldwide network of partners. To bolster this partner selling model, Andersen Consulting has established a network of marketing and communications professionals organized on a worldwide, industry and geographic basis.

- The function is managed by Murphy & Co., whose president, James E. Murphy, serves as Andersen Consulting's managing director for Marketing & Communications.
- Andersen Consulting is adapting an integrated approach to marketing with this industry-focused organization, wherein image development, market development and business development (sales) are closely linked and coordinated for maximum effectiveness.

As part of its international marketing efforts, Andersen Consulting is sponsoring the first annual Andersen Consulting World Championship of Golf, occurring in 1995.

Alliances

Andersen Consulting's alliance program maintains a portfolio of global, geographic and industry relationships with top solution and technology providers to help the firm deliver world-class solutions.

- These alliances contribute to much closer and productive working relationships with key vendors, enabling improved client responsiveness and the speed and quality of solution delivery.
- Andersen Consulting global alliances include companies such as SAP, Hewlett-Packard, Sun, Oracle and PeopleSoft.
- Andersen Consulting Americas alliances include companies such as Amdahl, Apple, AT&T GIS, Compaq, DEC, FileNet, IBM, Informix, Microsoft, Novell, Recognition International, Sybase and Tandem.

In February 1995, Andersen Consulting and SAP AG announced that they are partnering with several oil companies for the redevelopment of the R/2 (mainframe) downstream IS-Oil product onto an R/3 (client/server) platform.

© INPUT 1995 Reproduction prohibited.

Exhibit C

Andersen Consulting's Industry Practices
Key Clients

Industry Practice/Clients	Industry Practice/Clients	Industry Practice/Clients
Communications	**Financial Services**	**Government**
Ameritech	Aetna Life	Canada Post
AT&T	Allstate	French Army
Bell Atlantic	American Insurance Services Group	Massachusetts Department of Revenue
BellSouth	Australian Mutual Provident	Merced County Human Services Agency (CA)
BT	Banc One	New South Wales Police Department
DBP Telecom	Barclays Bank	New Zealand Inland Revenue Dept.
France Telecom	CIGNA	Ohio Bureaus of Worker's Compensation
GTE	Deutsche Terminborse	Phoenix Police Department
Hong Hong Telecom	Eagle Star (U.K.)	Postal Banking Bureau of Japan
McCaw Communications	Hong Kong Stock Exchange	Singapore Inland Revenue Department
MCI	IDS	State of North Carolina
Mercury/Cable & Wireless	John Hancock Financial Services	State of Texas
Norwegian Telecom	London Stock Exchange	Tennessee Department of Corrections
NTT	Mortgage Guaranty Insurance	U.K. Department of Social Security
NYNEX	NTT Leasing	U.S. Department of Commerce
Pacific Bell	Prudential Insurance Companies (U.S.)	U.S. Department of Defense
Southwestern Bell	SCOR	**Consumer Products**
Sprint	United States Fidelity and Guarantee Corp (USF&G)	Coles Meyer (Australia)
Telecom NZ	USAA	ICA Handlarnas AB (Sweden)
Telefonica de Espana	Various.Blue Cross Blue Shield Organizations	LA Rinascente (Italy)
Telstra Australia		Sears Canada
Time Warner Cable		ShopKo Stores
U S WEST		
Healthcare		
Aetna Professional Management Corp.		
Akershus County Hospitals (Norway)		
FHP International		
Group Health Cooperative		
Harvard Community Health Plan		
HealthNet HSI		
Kaiser Permanente of Northern California		
National Marrow Donor Program		
St. Vincent's Hospital (Melbourne)		

(continued)

© INPUT 1995 Reproduction prohibited.

Exhibit C
(cont.)
Andersen Consulting's Industry Practices
Key Clients

Industry Practice/Clients	Industry Practice/Clients	Industry Practice/Clients
Industrial Products	**Process/Energy**	**Utilities**
Apple Computer	AGIP	Baltimore Gas & Electric
Autodesk	Amoco	Brooklyn Union Gas
The Boeing Company	BP Exploration Operating Company Limited (BPX)	Carolina Power & Light
Canon	British Petroleum	C.E.Z.
Caterpillar	Ciba-Geigy	Connecticut Natural Gas
Chrysler Corporation	Diacel	EDF (France)
Compaq	Du Pont/Conoco	ENEL (Italy)
Fiat SpA	Freeport-McMoRan, Inc.	ERZ (Madrid)
Ford Motor Company	The Geon Company	Florida Power Corporation
General Motors Corporation	Georgia-Pacifc Corporation	National Power (U.K.)
Harley-Davidson Motor Company	Hempel Paints	Osaka Gas (Toyko)
Hewlett-Packard	Koa Oil Company	Pacific Gas & Electric
ITT	Neste Oil	The Southern Company
International Rectifier	PETROBRAS	Texas Utilities
LSI Logic	PETRONAS	Thames Water (U.K.)
Mabuchi Motor	Praxair	UtiliCorp United
Mazda	Quantum Chemical	Verbundnetz Gas AG (Germany)
Microsoft	Scott Paper	
Mitsubishi Capterpillar Forklift	Shell Oil Company	
Motorola	Sun Company	
NEC Technologies	YPF S.A. (Argentina)	
Nissan Motor Corporation, USA		
Samsung		
Sharp		
Siemens		
Sony		
Sun Microsystems		
Xerox		

In November 1994, Andersen Consulting announced it was selected by Microsoft as a premier systems integrator for Microsoft's end-to-end software solution for fully switched, digital interactive broadband networks. Andersen Consulting will integrate Microsoft's software with servers, switches, set-top boxes and network operation and management software to provide a total end-to-end system.

In 1994, Andersen Consulting opened its Center for Strategic Technology in Palo Alto (CA). In the center's first major collaboration with a technology provider, Andersen worked with Sun Microsystems to demonstrate the capabilities of Sun Technology to support enterprise-wide solutions. The resulting model of an integrated suite of business applications was exhibited at conventions in San Francisco, Paris and Tokyo.

Andersen Consulting manages a strong relationship with Oracle and is a member of Oracle's Interactive Multimedia Initiative and their Co-Operative Services

© INPUT 1995 Reproduction prohibited.

Initiative. Andersen has established several Oracle Centers of Expertise around the globe. The two companies are working together to deliver several industry-specific solutions to the market. Oracle training environments have been established in numerous Andersen offices to satisfy the demand for Oracle trained resources.

Andersen Consulting moves into the 6th year of a close business relationship with Hewlett-Packard. The long-term committment by both organizations has yielded a number of joint market initiatives and solutions for a variety of industry and functional segments and are available on a global basis. Andersen leverages Hewlett-Packard's involvement in its Business Integration Centers, Solution Centers and Centers of Expertise to maintain world-class competencies in Hewlett-Packard products and technologies.

Andersen Consulting teamed exclusively with PeopleSoft in early 1994 to jointly market and deliver financial and human resource client/server enterprise software solutions to government and public sector organizations in North America. In January 1995, Public Sector Financials, the first of a number of public sector products codeveloped by Andersen Consulting and PeopleSoft, was released. Andersen Consulting has exclusive integrator rights to these administrative solutions and is establishing a solution center dedicated to PeopleSoft.

Competition

Andersen Consulting's major competitors inelude Electronic Data Systems, Computer Sciences Corporation and SHL Systemhouse.

INPUT Assessment

Andersen Consulting's major strengths include:

- Industry vision and skills
- Global presence and network
- Full-services capability, particularly in Change Management
- Business integration vision
- Ability to handle very large, complex projects

Major challenges over the coming year include:

- Continuing to meet the client demand for the many skills required to be a full-services player
- Managing the growth of the global network of 32,000 persons
- Effieiently reusing knowledge capital for multiple clients.

Andersen Consulting's North American SAP Business Organization provides resources skilled in implementing SAP AG's R/3 client/server products.

- Andersen Consulting plans to increase its North American staff within the next year by an additional 1,000 consultants trained in the R/3 product and its rapid implementation methodogies. This will bring Andersen Consulting's SAP-dedicated consultants to more than 3,000 worldwide, with approximately 50% based in North America.
- Features of the organization include a certification program, SAP support at solution centers, SAP Industry Centers of Excellence (Oil and Gas-Houston, Electronics-Foster City, CA, Process/Chemical-Cincinnati and Consumer Packaged Goods-Chicago) and professionals with SAP R/3 and business integration skills.

© INPUT 1995 Reproduction prohibited.

ANDERSEN CONSULTING

69 West Washington Street
Chicago, IL 60602
Phone: (312) 580-0069
Fax: (312) 507-2548

Managing Partner:	George T. Shaheen
Status:	Partnership
Total Consultants:	22,765
Total Personnel:	26,730
Total Revenue:	$2.7 billion (12/92)

Key Points

- Andersen Consulting finds that more and more, clients are asking for a broader, fundamental "reengineering" or rethinking of their business, as opposed to narrow change. Andersen management believes its company is growing because it is able to deliver quantum improvements in clients' businesses. Andersen Consulting's business reengineering revenue was $700 million in 1992.

- Andersen Consulting's client service model for delivering solutions is "business integration"--the linkage of core business components. For change to work it must be in sync with an organization's people, processes, strategy, and technology. The organization has backed up its belief in business integration by developing service lines that can be combined to address the client's organization holistically. Those service lines are Strategic Services, Systems Integration, Change Management Services, and Business Process Management.

- The company's management believes that by 1993, 70% to 75% of its work will involve client/server technology. During 1992, more than $1 billion of Andersen Consulting's net revenue came from client/server-related engagements (including systems building, change management, and strategy), compared to $370 million in 1991 and $309 million in 1990.

- Andersen Consulting continues to commit major resources to its six industry practice groups. Its industry focus is key to remaining relevant to the marketplace and its clients.

- Andersen Consulting is positioned to meet the transnational needs of clients, operating as a global partnership through an international network of consultants with national practices in 47 countries. Over half of Andersen Consulting's revenue is derived from outside the U.S.

Copyright 1993 by INPUT. Reproduction Prohibited.

Company Description

Andersen Consulting is an international management and technology consulting organization whose mission is to help its clients change to be more successful. The organization works with clients from every industry to integrate their people, processes, strategies, and technologies.

Andersen Consulting offers its services through the following service lines:

- Business Process Management includes data center/network operations, applications development, applications management, and business function outsourcing.
- Systems Integration includes systems planning, design, building, and implementation.
- Strategic Services includes competitive and market strategy, organization and change strategy, business operations strategy, and information and technology strategy.
- Change Management Services[sm] includes organization change, technology assimilation, and education and training.

Andersen Consulting also offers manufacturing and logistics applications software products, computer-aided software engineering tools, and designware.

Andersen Consulting has operated as a separate business unit from the tax/audit firm Arthur Andersen since 1989, with its own operations and managing partner.

Organization

Andersen Consulting currently serves clients through 151 offices in 47 countries. The organization includes more than 26,000 personnel worldwide. The company's current organizational structure is shown in Exhibits A and B.

- During 1992, Andersen Consulting created a Quality Leadership Council to help oversee quality initiatives worldwide.
- Andersen Consulting also created a Global Management Council, whose mission is to analyze policy issues, review the organization's strategic direction, and ensure that Andersen Consulting's investments are consistent with that strategic direction.

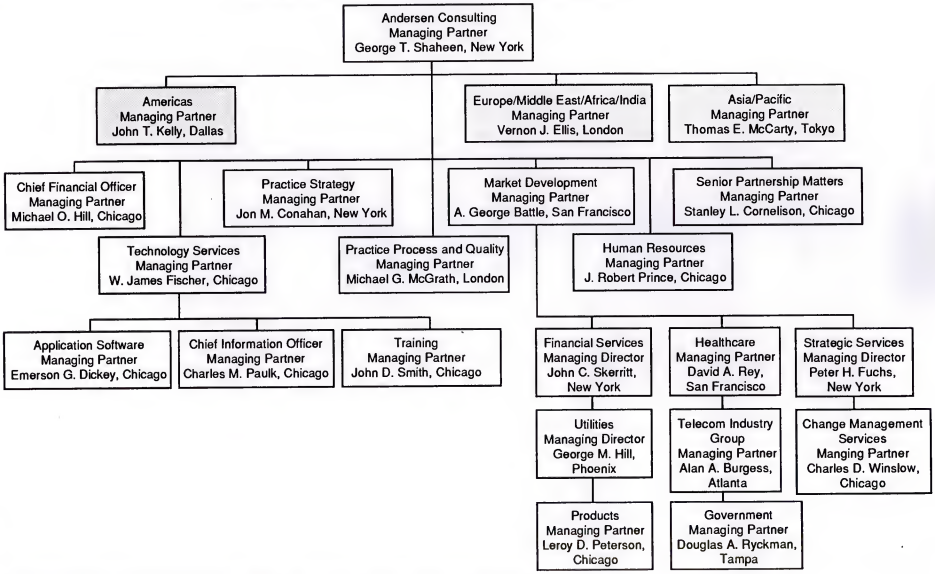
Andersen Consulting's services and products are offered through six major industry practices, as outlined in Exhibit C.

Copyright 1993 by INPUT. Reproduction Prohibited.

Copyright 1993 by INPUT. Reproduction Prohibited.

EXHIBIT A

Andersen Consulting Organizational Structure*

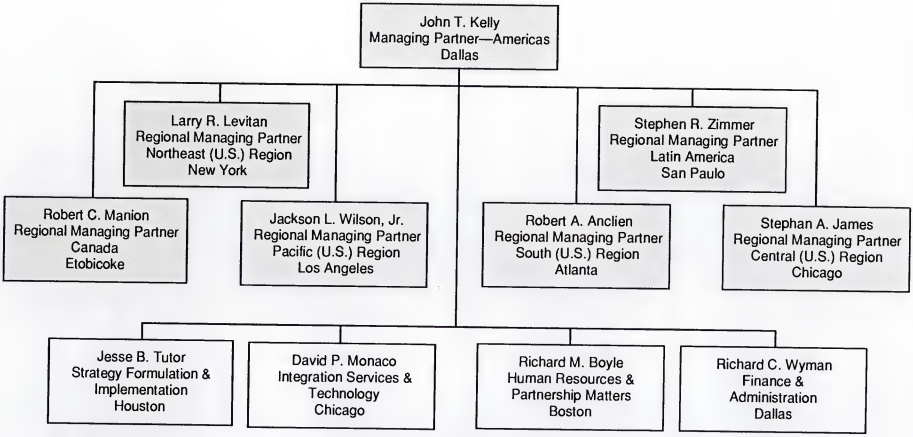


*Shaded boxes indicate line operations. All others are classified under worldwide management.

Copyright 1993 by INPUT. Reproduction Prohibited.

EXHIBIT B

Andersen Consulting Americas Operations*



*Shaded boxes indicate line operations. All others are classified under worldwide management.

EXHIBIT C

ANDERSEN CONSULTING INDUSTRY PRACTICES

INDUSTRY PRACTICE	INDUSTRY PRACTICE
Products · Consumer Products - Airlines/travel services - Food retailers and packaged goods manufacturers - Retailers - Transportation - Wholesale distribution · Industrial Products - Aerospace and defense - Automotive - Electronics/high-tech - Heavy equipment/construction - Consumer manufacturing · Process/Energy - Chemicals - Energy - Metals - Pulp and paper - Pharmaceuticals **Telecom Industry Group** · U.S. interexchange carriers · U.S. local exchange carriers · Global carriers · State-owned European and Asian telephone companies · Wireless technologies **Government** · Agencies · National governmental organizations and departments · Federal · State/local - Revenue - Labor - Transportation - Education - Retirement - Financial management - Law enforcement - Courts - Corrections - Human services - Lotteries	**Financial Services** · Insurance - Life - Property/casualty - Health - Health management - Reinsurance, brokerage, and investment management · Retail financial services - Commercial banks - Thrifts - Credit unions - Finance - Leasing · Financial markets - Investment banking - Brokerage - Clearance and settlements - Mergers and acquisitions - Swaps - Portfolio management - Equity products - Commodities - Risk management - Securitization - Fixed income - Mortgage - Off-balance sheet products **Healthcare** · Provider delivery systems (hospitals, multihospital systems, clinics) · Suppliers · Intermediaries--U.S. only (employer health plans, HMOs, health insurers) · Buyers--U.S. only **Utilities** · Customer information · Distribution integration · Financial management · Power plant integration · Energy management · Gas management · Materials management

Copyright 1993 by INPUT. Reproduction Prohibited.

Andersen's classifications are not specialties, but serve to organize Andersen Consulting's varied industry work. Each of the industry practices is headed by a managing partner and staffed with consulting specialists who have developed industry-specific expertise.

Financials

Andersen Consulting's 1992 revenue reached $2.72 billion, a 16% increase over 1991 revenue of $2.34 billion.

Although Andersen Consulting's fiscal year end is August 31, financials are shown for calendar years ending December 31 to conform with common reporting practices. A four-year revenue summary follows:

ANDERSEN CONSULTING
FOUR-YEAR REVENUE SUMMARY
($ millions)

	CALENDAR YEAR			
ITEM	1992	1991	1990	1989
Revenue	$2,722.9	$2,341.4	$2,057.1	$1,561.3
· Percent increase from previous year	16%	14%	32%	N/A

Revenue growth in 1992 was attributed to the following:

- The organization's Asia/Pacific region showed the strongest growth (26%), followed by Europe/Middle East/Africa/India (19%), and the Americas (13%).
- Of Andersen Consulting's six major industry practices, Utilities and Telecom Industry Group showed the strongest growth over 1991 (41%).
 - Deregulation of the European utilities and telecommunications industries and the increasingly competitive nature of those industries in the U.S. fueled this growth.
 - Growth rates for the organization's other industry practices were as follows: Products, 14%; Financial Services, 14%, Healthcare, 10%, and Government 2%.

Alliances

Andersen Consulting has alliances and marketing agreements with various vendors that complement the firm's strategy of providing the services and products that best meet the needs of its clients.

Copyright 1993 by INPUT. Reproduction Prohibited.

Examples of alliances announced by Andersen Consulting include the following:

- Andersen Consulting has a cooperative agreement with SAP AG whereby Andersen can market SAP's R/3 integrated business software and provide systems integration and consulting services to joint clients.
- Andersen Consulting and Norand Corporation have an alliance to market each other's products and services to retail, wholesale distribution, and consumer products clients. The agreement involves Norand's portable data collection equipment and Andersen's DCS/Logistics distribution software and MAC-PAC manufacturing software.
- Since 1991, Andersen Consulting has allied with Microsoft to provide services to clients in developing client/server applications.
- In late 1989, the organization became a remarketer of Sun Microsystems' entire line of computers and software.

The Business Integration Partnership (BIP), part of the Americas Technology Integration Services organization, is Andersen Consulting's program for establishing and managing business relationships with third-party providers of hardware, software, and specialized services.

- The primary objectives of the BIP program are to enhance Andersen's overall business integration capabilities, develop an alternate channel of business opportunity, and generate margin from the sale of third-party products.
- Current partners under the BIP program include Amdahl, Apple, AT&T/NCR, BBN Software Products, Dell Computer, Digital Communications Associates, DEC, FileNet, Hewlett-Packard, IBM, Infonet, Informix, Microsoft, Norand, Novell, Palette Systems, Plexus, Pyramid, Sun, Sybase, Symbol, SynOptics Communications, Systems Center, and Tandem.

Technology Expertise

Andersen Consulting has a strong commitment to technology innovation, which is enabled by its Technology Services organization and by products and facilities sponsored by local offices and other internal groups.

Technology Services works with local offices and other internal groups to foster innovation. Technology Services is also responsible for researching and developing emerging technologies, establishing

Copyright 1993 by INPUT. Reproduction Prohibited.

standard practices, developing practice methodologies, producing practice aids, and developing all of Andersen Consulting's software products. The organization is structured as follows:

- Technology Integration Services--Worldwide develops emerging technologies for clients. Some of these technologies include client/server, telecommunications, artificial intelligence, image processing, and object-orientation. It also disseminates technical specialty skills directly into local offices for client engagements by sending technical experts into the field. Divisions work on many technologies, among them AS/400, Knowledge Systems, Imaging, and New Age Systems (client/server and alternative architectures).

- Software Products develops Andersen Consulting's applications products and CASE tools, and supports the Project Eagle initiative.

 - Applications products developed and supported by this group grange from integrated manufacturing systems to distribution and financial control systems.

 - FOUNDATION is Andersen's CASE toolset, and one of the first CASE tools to support delivery of client/server solutions. FOUNDATION offers ongoing support to clients and works on the further development of the FOUNDATION toolset.

 - Project Eagle is developing methodologies and tools in support of successful implementation of application software-based systems.

- Andersen Consulting has a strong commitment to research and development. Andersen's investment in research and development was $286 million in 1992, compared to $276 million in 1991. The Research and Development organization includes CSTaR (Center for Strategic Technology Research), Technology Transfer, and the Methodology Program.

 - CSTaR seeks to identify technologies and techniques that solve particular classes of business problems. Areas of current research include corporate knowledge management, decision technology, and software engineering.

 - Technology Transfer facilitates the adaptation and take-up of new and emerging technologies.

 - Methodology Program works to accelerate the acceptance and use of new technologies.

 - Andersen Consulting is expanding its links with Europe's leading universities. At the IMD Business School in Switzerland,

Copyright 1993 by INPUT. Reproduction Prohibited.

Andersen Consulting is a lead sponsor of a research initiative that focuses on the challenges facing manufacturing companies (Manufacturing 2000). Since 1990, Andersen Consulting Spain has organized yearly summer courses in conjunction with Universidad Complutense of Madrid.

- Andersen Consulting is also linked to Northwestern University's Institute for the Learning Sciences, of which Andersen is the founding sponsor, and the Microelectronics and Computer Corp., a cooperative research venture.

Supplementing these groups' work within Technology Services are the Chief Information Officer (CIO) organization and Andersen Consulting Education.

- The CIO Group focuses on helping everyone in Andersen Consulting build up and share knowledge globally, and to investigate and enable information and knowledge management requirements. Chief among its projects are the development and installation of a firmwide communications and groupware linkup called the Knowledge Exchange.

 - Knowledge Exchange is a sophisticated electronic platform that uses Lotus Notes to help Andersen Consulting consultants retrieve and communicate all types of information to help deliver client service. Its goal is to aid in marshalling global resources and tap into the best thinking of local practices.

 - Knowledge Exchange is in use in a number of offices now and will be available to all personnel in all 151 offices and 47 countries.

- The Andersen Consulting Education group develops and conducts training programs for consulting personnel worldwide. Topics addressed include technical issues such as client/server development, and management and personal development courses.

Andersen Consulting's Business Integration Centers are working environments that demonstrate how technology, when integrated with a business vision and advanced management techniques, can change the way business is done.

- The centers are used primarily for research and development, training client and internal personnel, and demonstrating technology solutions from Andersen Consulting and participating vendors of hardware and software.

Copyright 1993 by INPUT. Reproduction Prohibited.

- Business Integration Centers are as follows:

 - Atlanta: LOGISTICS 2000 is a working model of a company using advanced technology to integrate sales and customer service, inventory, warehousing, transportation, and strategic planning.

 - Atlanta: PROCESS 2000 shows the benefits of applying process reengineering and technology by focusing on the operations of an innovative chemical manufacturer.

 - Chicago: SMART STORE is Andersen's vision of how food retailers can reconfigure the traditional retailing establishment by rethinking the way consumers shop and challenging the retailing industry's notions of how the food retailing industry is applying management and technology. The center incorporates hardware and software from nearly 100 participating vendors.

 - Chicago: The Retail Place highlights a consumer-driven retail organization from the sales floor to the distribution center to the corporate office.

 - Hospital of the Future--the Health Strategy Center, located in Dallas, uses realistic recreations of health care organizations to show how new approaches to care delivery can help enhance quality and contain costs.

In early 1993, Andersen Consulting announced it would establish a Technology Integration Center in Palo Alto (CA). The center is designed to provide a forum for integrating the capabilities of key technology and research organizations throughout the Silicon Valley region and provide a common site to build solutions for business problems.

Training

Andersen Consulting spends $7,500 per consultant on training. During 1992, Andersen Consulting invested a total of $164 million on training.

Through the Professional Education Division, more than 250 courses are available to each Andersen Consulting consultant. By the time a consultant reaches the associate partner level, he or she will have received more than 1,000 hours of training.

- The St. Charles (IL) Center for Professional Education is the organization's hub for internal training and has 120 classrooms accommodating more than 2,000 participants.

Copyright 1993 by INPUT. Reproduction Prohibited.

- Other worldwide training locations include Melbourne (Australia), Singapore, and Veldhoven (the Netherlands).
- Following initial training, consultants return to St. Charles every 18 months for additional training.

Key Products and Services

INPUT estimates that approximately 65% of Andersen Consulting's 1992 revenue was derived from systems integration, 30% from professional services, 4% from applications software products, and 1% from systems software products.

Andersen Consulting's areas of expertise include the following:

- *Systems Integration:*
 - Systems planning
 - Systems design
 - Systems building
 - Systems implementation
- *Business Process Management*:
 - Data center/network operations
 - Applications development
 - Applications management
 - Business function outsourcing
- *Strategic Services*:
 - Competitive and market strategy
 - Organization and change strategy
 - Business operations strategy
 - Information and technology strategy
- *Change Management Services (CMS):* This practice works with organizations to align their workforce with their technology, processes, and strategy to make change work. CMS works with its clients in the areas of:
 - Organization Change
 - Education and Training
 - Technology Assimilation
 - Integrated Performance Support

Copyright 1993 by INPUT. Reproduction Prohibited.

Andersen Consulting's service lines might be applied separately or together for any given client situation. Combining service lines is how Andersen Consulting delivers business integration solutions.

- At UCAR Carbon Co., for example, consultants from the Systems Integration, Change Management Services, and Strategic Services areas have been involved in a reengineering of the organization, including a corporate restructuring, retraining, and the development of information systems for manufacturing, order processing, and other areas.

- For Nissan Motor Co., Systems Integration and Strategic Services personnel have helped the client redesign business processes, introducing new technologies, automating dealer communications, and modifying customer services in support of Nissan's new supply chain.

Systems Integration:

Through the Systems Integration practice, Andersen Consulting plans, designs, and builds complex computer systems, and then integrates them into a client's operations. These projects may require the design and installation of systems using custom-designed software, expertise in project management, and change management computer-based training. Projects may be partially managed at the client site, supplemented by Andersen's advanced technology centers.

Contract examples include the following:

- Implementing SCRIBE, a computerized election imaging system, for the City of New York. SCRIBE simplifies the voting process by streamlining the poll-worker's job of locating each voter name and eliminating misplaced registration cards.

- A three-year, $10 million contract with Canada Post Corporation to provide reengineering, systems integration, applications, and infrastructure support for Canada Post's postal system.

- Acting as systems integrator for Connecticut Natural Gas Corporation's new customer-related systems projects, encompassing a new Customer Information System and Distribution Construction Information System.

- A three-year, $2 million contract to design and install an information system to handle the National Marrow Donor Program data base. The system will automate several manual search activities.

Copyright 1993 by INPUT. Reproduction Prohibited.

- Serving as systems integrator for Colonial Gas Company for a series of projects totalling $17 million for a five-year period. The projects will provide the utility with a fully integrated network and application systems architecture.

- Installing Info 94, a PC network providing visitors and journalists with a direct link to results, schedules, athletes' biographies, and other details for the 1994 Winter Olympics in Lillehammer (Norway). The system debuted at the 1992 Games under the name Info 92.

- Implementing the Tennessee Offender Management Information System (TOMIS), an artificial intelligence and knowledge-based system developed for the Tennessee Department of Correction and the Tennessee Board of Parole.

- Developing and implementing a new Work Management System for BC Gas using client/server architecture on a cooperative processing platform.

- Developing and implementing a Client File System for Allstate.

- Developing an optical document image processing system for the Ontario (Canada) Ministry of Consumer and Commercial Relations. The system will capture the province's 10 million statistical records.

- Helping Northwest Airlines integrate artificial intelligence, image processing, workstations, and other technologies to create a system that helps Northwest more accurately track passenger revenue and collect marketing information about customers' travel and spending patterns.

- For Baltimore Gas & Electric, Andersen Consulting completed a customer information system that is being marketed to other utilities worldwide as CUSTOMER/1 software.

Business Process Management:

Business Process Management encompasses data center/network operations, applications management and development, and business process outsourcing. Business Process Management takes care of the daily needs of a client's systems so that the client can focus on its business. This service line is responsible for outsourcing deals in which a client turns over part or all of its data processing operations to Andersen Consulting.

Copyright 1993 by INPUT. Reproduction Prohibited.

Work in this practice area includes the following agreements:

- A five-year contract, together with IBM ISSC and ComputerLand, to assist Freeport McMoRan in migrating to a client/server processing environment.

- A five-year, $89 million contract with British Petroleum Exploration Europe to manage British Petroleum's financial accounting services.

- A $200 million, 10-year agreement with Sun Refining & Marketing Co., under which Andersen Consulting acquired Sun R&M's Dallas Computer Center, hired its employees, and assumed management of all Dallas Computer Center's operations. (Contract signed October 1990).

- A $50 million agreement with Voluntary Hospitals of America Inc. to install and manage a computer system that provides physicians and management at VHA member hospitals with comparative information on the cost and quality of patient care--even if their billing systems are different. (Contract signed fall 1990).

- A five-year, $10 million contract to provide IBM SNA network support, systems software maintenance, and technical support for Dial Corp.'s applications programming staff. Andersen Consulting is also managing Dial's data center in Phoenix and migrating operations to Andersen Consulting's Dallas systems operations center.

This service line is supported by large processing centers (called systems management centers) in cases where it makes sense to perform systems operations away from the client site.

- Systems management centers are large, mainframe computer facilities staffed with systems specialists for use in some situations where a client has turned over part or all of its computer operations to Andersen Consulting.

Strategic Services:

Strategic Services helps clients develop market-driven strategies and align their business processes with those strategies in order to deliver value to customers.

Client examples include the following:

- For drug-licenser Astra Merck & Co., helping to create a new standalone company organization structured around six core business processes.

Copyright 1993 by INPUT. Reproduction Prohibited.

- For KFC, providing a Global Strategic Information Systems Plan, identifying key business processes for reengineering, and developing information systems in support of change.

Examples of other work performed by the practice include the following:

- For a manufacturer of outdoor power equipment, Andersen Consulting developed and implemented a customer-driven strategic marketing plan and consumer strategy for the 1990s.

- Andersen Consulting helped a public transportation system make the transition from state administration to local control. Andersen planned the transition and designed a new organization.

- For a multibillion-dollar business unit of a major process manufacturer, Andersen Consulting streamlined the supply chain to simplify and speed the flow of products from manufacturer to distributor.

- For a newly merged food products company, Andersen Consulting developed a strategy for integrating operations and information technology of the two previously separate businesses.

Change Management Services:

The Change Management Services practice helps organizations manage all elements of change.

- The philosophy behind change management is that the successful use of new technology depends on an organization's ability to properly position, educate, and motivate its people to employ it.

- Using methodologies and frameworks for planning, designing, implementing, and maintaining change, Andersen Consulting seeks to help organizations develop well-organized, well-informed, highly skilled, and highly motivated people at all levels.

Client examples include the following:

- Assisting to reengineer the entire process of delivering benefits for the U.K. Department of Social Security (DSS)--from the system used, to the case workers who use it, to the work surrounding the system. The Andersen Consulting team redesigned jobs for tens of thousands of workers and physically altered offices to accommodate the system. Training was provided for all users in support of the migration from a pencil-and-paper operation to an automated, networked environment. The results include: drop in error rates on

Copyright 1993 by INPUT. Reproduction Prohibited.

assessment from 10% to 2%, efficiency up by 20% annually, higher job satisfaction, and an annual savings to DSS of $290 million.

- Working with various bread manufacturers and retailers to introduce bread packaging and Western management techniques in Russia as part of a project to privatize the Moscow bread industry.

- Assisting Standard Chartered Bank of Hong Kong to revamp the bank's transaction systems throughout Asia. Andersen developed computer-based training for more than 3,000 employees to offer simulated practice and testing of more than 70 bank functions affected by the new system.

- Working with Aetna Life and Casualty to help them redesign business processes and jobs to help them meet their goal of providing customer-oriented services. Employees who originally concentrated their efforts on one function were repositioned in customer-focused teams, resulting in a 30% to 40% increase in efficiency and clearly improved customer services.

Services Support:

Andersen Consulting's services are supported through two types of facilities--systems management centers and advanced technology centers--and network management services.

Systems management centers (previously discussed) are large, mainframe computer facilities that support systems operations services.

Advanced technology centers (ATCs) are staffed with technology specialists, workstations, and computer networks to provide client support, marketing support, and research and development. The skills and knowledge of specialists at ATCs can be shared on multiple client projects, as opposed to having resources tied to one long-term engagement.

Andersen Consulting's Network Solutions practice provides a range of network integration consulting services complementing the organization's service lines and industry programs. Network Solutions' scope of services encompasses Business and Network Planning, Network Analysis and Design, and Network Installation.

- Network Solutions works with the Business Process Management practice to identify potential outsourcing opportunities, orchestrate outsourcing arrangements, support client network migrations, and identify new network environments to better meet clients' changing information technology requirements.

Copyright 1993 by INPUT. Reproduction Prohibited.

- AANet is Andersen Consulting's primary telecommunications vehicle for meeting its information needs. In addition, AANet is available to support network outsourcing services. The network spans North America and provides coverage to Europe as well as select regions of Asia.

- In addition, Andersen Consulting has formed alliances with INFONET Services Corp. and SigmaNet to penetrate areas AANet does not access.

- Andersen Consulting continues to develop its network services capabilities, reflecting the organization's commitment to the network outsourcing market.

Applications Software Products:

PROCESS/1 is the only planning and execution system engineered and built specifically for process manufacturers using integrated CASE technology and open client/server architecture.

- Applications include Customer Service; Enterprise Product Management; Plant Operations; Environmental, Health, Safety, and Training; Quality-Based Costing; and Distribution and Logistics.

- PROCESS/1 supports enterprise-wide customer focus and multinational operations to integrate strategies, people, technologies, and business processes throughout the supply chain--from product development, purchasing and production, to distribution, marketing, and sales.

DCS/Logistics is an on-line, integrated system that supports the customer service, inventory planning and management, and warehouse operations functions of medium-to-large manufacturing and distribution organizations.

- DCS/Logistics' nine applications accommodate a variety of distribution styles--centralized or distributed processing, single or multi-warehouses--on either an IBM System/370 or DEC VAX platform. Multilanguage and multicurrency features are also included.

- There are currently more than 200 DCS/Logistics installations.

The MAC-PAC/D Family of Products is a specialized, fully integrated manufacturing enterprise management system for aerospace and defense contractors and other complex manufacturers.

Copyright 1993 by INPUT. Reproduction Prohibited.

- The MAC-PAC/D Family of Products includes: MAC-PAC/D (manufacturing), IPD (engineering), PROCUREMENT/D (procurement), FACTORY MANAGEMENT/D (shop floor), FINANCE/D (cost accounting), and CAPP/D (process planning).

- MAC-PAC/D, IPD, PROCUREMENT/D, and FINANCE/D run on IBM and DEC mainframes. FACTORY MANAGEMENT/D runs on the Hewlett-Packard open architecture platform and CAPP/D runs on IBM and HP workstations.

MAC-PAC for the IBM AS/400 is a fully integrated, on-line manufacturing, distribution, and financial system that operates in a single or multiplant environment.

- The system supports mixed-mode manufacturers operating in discrete, just-in-time/repetitive, make-to-order, job shop, or a combination of these manufacturing environments. Multilanguage and multicurrency features are also included.

- There are currently more than 800 installations.

Through its Financial Services industry practice, Andersen Consulting and Banc One Financial Services have developed TRIUMPH®, an advanced credit card processing system. The software has also been licensed to Barclays Bank PLC of London for in-house use.

Client/Server Application Development Tools:

Andersen Consulting's FOUNDATION organization's mission is to provide software development products, services, and methodologies that enable organizations to build applications that span all major software, hardware, and network environments.

FOUNDATION provides two application development solutions--FOUNDATION for Cooperative Processing (FCP) for developing client/server applications, and FOUNDATION for mainframe-based systems.

- FOUNDATION for Cooperative Processing (FCP): The new FCP client/server solution is composed of client/server methodology, development tools, and support services that help high-end departmental and enterprise-wide organizations overcome the barriers for developing systems that operate on disparate hardware platforms and operating systems.

 - FCP is built on a fully relational data base management system that allows networked workgroups of developers to store and reuse defined objects for building client/server applications.

Copyright 1993 by INPUT. Reproduction Prohibited.

- The LAN- and object-based repository is integrated with each of the following components of FCP:

 FOUNDATION Methods is a field-tested methodology that combines guidance through the processes involved in client/server development with project management guidelines and a proactive quality approach.

 FOUNDATION Design incorporates systems analysis and design functions such as Rapid Application Builder; entity-relationship, data flow, and procedure diagrammers; window and screen painters and object detail windows; and powerful tool palettes.

 FOUNDATION Production incorporates window editing services for GUI development, provides programs and application program interfaces, and interfaces with other GUI software packages.

 FOUNDATION Construction generates code from objects created with FOUNDATION Design and stored in the LAN-based relational repository.

- FOUNDATION is also a fully-integrated development environment for the creation of mainframe-based information systems and allows integrated application development and execution on multiple platforms and operating systems. FOUNDATION for mainframe-based systems' components include the following:

 - METHOD/1 is a LAN-based automated methodology that provides a systems development framework--from information planning to production systems support.

 - DESIGN/1 is a LAN-based set of analysis and design tools that automate systems design tasks and techniques to improve productivity and design quality.

 - INSTALL/1 is a development environment and application generator for DEC, IBM, and Bull that provides portability and reuse across multiple platforms.

 - PLAN/1 is an automated LAN-based tool for information planning and engineering that helps incorporate business strategies for planning systems development projects.

Designware is a cross between packaged software and custom-developed systems applications that provides a jump start on application development. Designware offerings are marketed through Andersen Consulting's industry practices and include:

Copyright 1993 by INPUT. Reproduction Prohibited.

- CUSTOMER/1, a customer information model for the utilities industry
- WORK/1, work order management designware for the utilities industry
- INVEST/1, for institutional investors creating securities accounting and management systems
- LIFE/1, a suite of products, including planware (software for information planning) and designware, that supports the policy administration needs of life insurance companies

In order to get clients involved in software research and development, Andersen Consulting also operates ASSIST, a user's group of its applications software and development tools. ASSIST membership is open to any licensed user of Andersen Consulting software products worldwide.

Industry Markets

A three-year summary of revenue by industry market, as provided by Andersen Consulting, follows:

ANDERSEN CONSULTING
THREE-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	CALENDAR YEAR					
	1992		1991		1990	
	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Products	$1,122.4	41%	$985.4	42%	$907.2	44%
Financial services	672.3	25%	590.6	25%	534.5	26%
Government	287.9	11%	281.6	12%	250.9	12%
Utilities	260.3	9%	184.7	8%	124.0	6%
Telecom Industry Group	192.2	7%	136.0	6%	107.4	5%
Health care	77.5	3%	70.2	3%	53.2	3%
Other	110.1	4%	92.9	4%	79.9	4%
TOTAL	**$2,722.9**	**100%**	**$2,341.4**	**100%**	**$2,057.1**	**100%**

Copyright 1993 by INPUT. Reproduction Prohibited.

Andersen Consulting regularly conducts studies and publishes reports addressing issues related to the vertical markets targeted through its industry practices. Recent reports have been released related to the retail, travel, insurance, and logistics industries.

Clients

Clients by industry practice include the following:

- Financial services: Aetna Life, Allstate, Banc One, Barclays Bank, Cigna, Deutsche Terminborse, Prudential, Stock Exchange of Hong Kong, Standard Chartered Bank, USAA
- Government: Massachusetts Department of Revenue, Merced County (CA), New Zealand Inland Revenue Department, Ontario Ministry of Consumer and Commercial Relations, State of North Carolina, State of Tennessee, U.K. Department of Social Security
- Health care: Bayfront Medical Center, Lee Memorial Hospital, Milwaukee County Medical Center, Voluntary Hospitals of America
- Products: Black & Decker, Caterpillar, Dial Corp, Harley-Davidson, J. Baker, KFC, Kraft General Foods Canada, Kuwait Airways, Lever Brothers, Mercantile Stores, Northwest Airlines, Pizza Hut, Revlon, SmithKline Beecham Consumer Brands, Steelcase, Sun Refining & Marketing
- Telecom: AT&T, Pacific Bell, TDS Telecom, Nippon Telephone, U S WEST, WestTel Radiotelefon (Hungary)
- Utilities: BC Gas, Baltimore Gas & Electric, Brooklyn Union Gas, Carolina Power & Light, Connecticut Natural Gas, ERZ (Madrid, Spain), Florida Power, National Power (U.K.), Texas Utilities, Thames Water (U.K.), Verbundnetz Gas AG (Germany)

Geographic Markets

Approximately 46% of Andersen Consulting's 1992 revenue was derived from the U.S. and the remainder from international sources. A two-year summary of source of revenue follows:

Copyright 1993 by INPUT. Reproduction Prohibited.

ANDERSEN CONSULTING
TWO-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	CALENDAR YEAR			
	1992		1991	
ITEM	REVENUE $	PERCENT OF TOTAL*	REVENUE $	PERCENT OF TOTAL
Americas				
- U.S.	$1,254.5	46%	$1,119.7	48%
- Canada	64.2	2%	53.3	2%
- South America	55.6	2%	46.9	2%
- Mexico	8.7		6.5	
	$1,383.0	51%	$1,226.4	52%
Europe/Middle East/ Africa/India	$1,130.9	41%	$949.5	41%
Asia/Pacific	$209.0	8%	$165.5	7%
TOTAL	**$2,722.9**	**100%**	**$2,341.4**	**100%**

* *Note: Does not add to 100% due to rounding.*

Andersen Consulting has 151 offices in 47 countries, including 75 offices in the Americas, 58 offices in Europe/Middle East/Africa/India, and 18 offices in Asia/Pacific.

Copyright 1993 by INPUT. Reproduction Prohibited.

ANDERSEN CONSULTING
69 West Washington Street
Chicago, IL 60602
(312) 580-0069

George T. Shaheen, Managing Partner
Total Consultants: 21,668
Total Personnel: 25,100
Total Net Revenue, Fiscal Year End
8/31/91 $2.26 billion

The Company

Andersen Consulting offers management and technology consulting to clients in nearly every business and governmental sector. The organization helps clients use information technology competitively in all phases of their management activities--strategic, operations, and financial.

- Andersen Consulting believes it can ultimately help its clients "reengineer" or rethink the way they do business--a process, the firm claims, that can lead to business integration, or the integration of technology, strategy, operations, and people.
- Since 1989 Andersen Consulting has operated as a separate business unit from tax/audit firm Arthur Andersen, with its own operations and managing partner.

Andersen Consulting offers its services through the following service lines:

- Systems Management, including operations and network services, facilities management, applications management, and backup/recovery services
- Systems Integration, including systems design, building, integration, and implementation
- Strategic Services, including competitive and market strategy, organization and change strategy, business operations strategy, and information and technology strategy
- Change Management Services℠, including organization change, technology assimilation, knowledge transfer, and quality management

Andersen Consulting also offers manufacturing and logistics applications software products and FOUNDATION, a computer-aided software engineering (CASE) toolset.

Copyright 1991 by INPUT. Reproduction Prohibited.

Andersen Consulting's services and products are offered through six major industry practices (the classifications are not specialties, but serve to organize Andersen Consulting's varied industry work). Each of the following practices is headed by a managing partner and staffed with consulting specialists who have developed industry-specific expertise:

- Financial Services (Financial Markets, Insurance, Retail Financial Services)
- Government
- Healthcare
- Products (Aerospace and Defense, Airlines, Discrete/Repetitive Manufacturing, Energy, Food/Consumer Packaged Goods, General Retail and Wholesale Distribution, and Process Manufacturing)
- Telecom Industry Group
- Utilities

Andersen Consulting currently serves clients through 151 offices in 46 countries. The organization includes more than 21,000 consultants worldwide. The company's current organizational structure is shown in Exhibits A and B.

Andersen Consulting's fiscal 1991 revenue reached $2.26 billion, a 20% increase over fiscal 1990 revenue of $1.88 billion. A five-year revenue summary follows:

ANDERSEN CONSULTING
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
ITEM	8/91	8/90	8/89	8/88	8/87	CAGR
Revenue	$2,256.3	$1,875.5	$1,443.0	$1,112.0	$838.4	28%
· Percent increase from previous year	20%	30%	30%	32%	32%	

Fiscal 1991 revenue growth was attributed to the following:

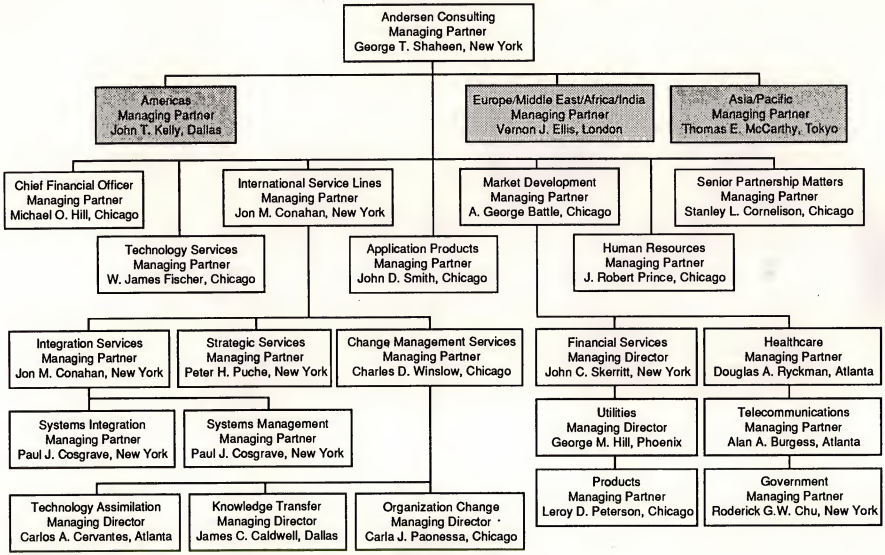
- The organization's Europe/Middle East/Africa/India region showed the strongest growth in U.S. dollars (37%), followed by Asia/Pacific (25%), and the Americas (10%).

Copyright 1991 by INPUT. Reproduction Prohibited.

Copyright 1991 by INPUT. Reproduction Prohibited.

EXHIBIT A

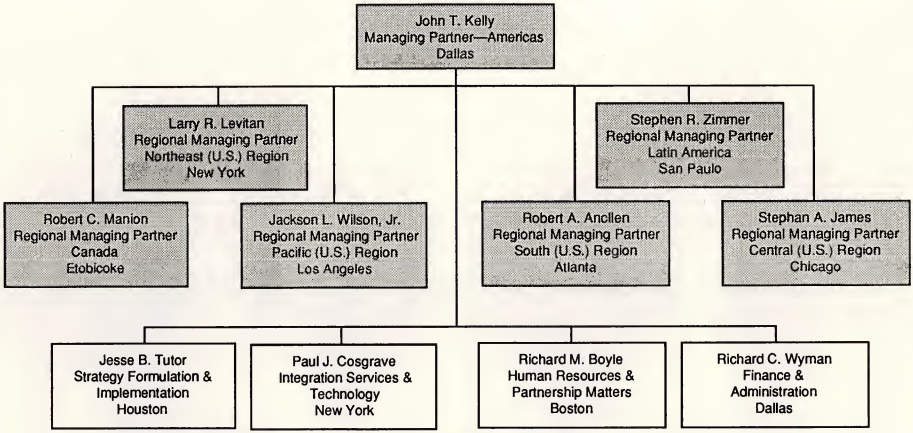
Andersen Consulting Organizational Structure*



*Shaded boxes indicate line operations. All others are classified under worldwide management.

EXHIBIT B

Andersen Consulting Americas Operations*



*Shaded boxes indicate line operations. All others are classified under worldwide management.

Copyright 1991 by INPUT. Reproduction Prohibited.

- Growth in Europe comes from a strong base of work in Western Europe with clients such as Thames Water, the 1992 Winter Olympics, and the U.K. Department of Social Security.

- The organization also continues to make inroads in Eastern Europe. In the past year, Andersen Consulting has advised the Soviet Union on the distribution of bread in Moscow, announced a large contract with FSM (a major Polish automobile company), and helped implement a cellular telephone infrastructure for Hungary, among other initiatives in that region.

- The Americas, Andersen Consulting's most mature market, continues to feel the effects of a recession that has affected other markets.

- Andersen Consulting believes it has succeeded in Asia/Pacific because it varied its activities by industry and service lines. When a recession hit Australia, business was unhurt because of a variety of work across the region.

· Of Andersen Consulting's six major industry practices, Healthcare showed the strongest growth over fiscal 1990 (45%). Growth rates for the organization's other industry practices were as follows: Utilities, 34%; Government, 32%; Telecom Industry Group, 22%; Financial Services, 21%; and Products, 16%.

Alliances

Andersen Consulting has various alliances and marketing agreements with various vendors that complement the firm's strategy of providing the services and products that best meet the needs of its clients.

Examples of alliances announced by Andersen Consulting include the following:

· In 1991, Andersen Consulting allied with Microsoft to provide services to clients in developing client/server applications.

· In 1990 Andersen agreed with Xerox to provide its clients with products from the new Xerox DocuTech Publishing Series.

· In late 1989, the organization became a remarketer of Sun Microsystems' entire line of computers and software.

Andersen's Business Integration Partnership (BIP) program establishes and manages alliances with companies in order to combine systems and specialized services. Current partners under

 Copyright 1991 by INPUT. Reproduction Prohibited.

the BIP program include Amdahl, Apple, AT&T/NCR, BBN Software Products, Compaq, Dell Computer, Digital Communications Associates, DEC, FileNet, Foxboro, Grid Systems, Groupe Bull, Hewlett-Packard, IBM, Infonet, Informix, Microsoft, Norand, Novell, Palette Systems, Plexus, Pyramid, Sun, Sybase, Symbol, SynOptics Communications, Systems Center, Tandem, and Toshiba.

Research and Development

Andersen Consulting has a strong commitment to research and development, through formal organizations such as Technology Services, and through projects and facilities sponsored by local offices and other internal groups.

- In addition, service, products, and support facilities are sources of leading-edge ideas about products and the application of technology with clients.

- Despite recessionary conditions, in fiscal 1991 Andersen Consulting increased its research and development investment to approximately $264 million, up from $238 million the year before.

Technology Services is responsible for technology visioning and knowledge transfer. One of the group's primary responsibilities is developing emerging technologies for clients. Those technologies include artificial intelligence, image processing, telecommunications, and object-oriented development. This unit also establishes standard practices, develops practice methodologies, practice aids, and the FOUNDATION development tool. The group is organized as follows:

- Advanced Technology Group develops and disseminates technical specialty skills and provides direct support to local offices for client engagements. The group is organized into divisions, each of which specializes in a particular technology: New Age Systems (alternative architectures, workstation technology), Digital Equipment Corporation and AS/400, Knowledge-Based Systems Technology, Enterprising Systems, and Imaging.

- Network Solutions participates in client engagements or projects in telecommunications and network computing and provides training and worldwide support to the consulting practice. This unit is further discussed later in this profile.

Copyright 1991 by INPUT. Reproduction Prohibited.

- CSTaR (Center for Strategic Technology Research) seeks to identify technologies and techniques solving particular classes of business problems.
 - CSTaR consists of three areas of research: human systems integration, decision technology, and software engineering.
 - Additionally, CSTaR is Andersen Consulting's liaison with Northwestern University's Institute for Learning Sciences and Microelectronics and Computer Technology Corp., a cooperative research venture involving 49 North American companies.
 - Research projects currently taking place in CSTaR include development of groupware and knowledge-based software engineering.
- FOUNDATION Development Group provides full-function CASE technology and associated services to the marketplace and consulting practice.
- The Advanced Development Group assists Andersen Consulting professionals in their use of new technology. Current programs include enhancing Andersen Consulting's capabilities with information engineering techniques, creating a new methodology for custom systems design and installation, and incorporating workstation and object-oriented technology into the practice.
- Knowledge Transfer supports Andersen Consulting by providing knowledge transfer and training in key technical, functional, and industry areas.

Andersen Consulting's Business Integration Centers are working environments that demonstrate how technology, when integrated with a business vision and management sense, can change the way business is done.

- The centers are used primarily for research and development, training client and internal personnel, and demonstrating technology solutions from Andersen Consulting and participating vendors of hardware and software.
- Business Integration Centers are as follows:
 - Atlanta: LOGISTICS 2000 is a working model of a company using advanced technology to integrate sales and customer service, inventory, warehouse, transportation, and strategic planning.

Copyright 1991 by INPUT. Reproduction Prohibited.

- Chicago: SMART STORE 2000 is Andersen's vision of how technology will be applied at food retailers and addresses food industry management concerns about the future. The center incorporates hardware and software from more than 20 participating vendors.

- Dallas Infomart: Hospital of the Future is a model that serves as a permanent site for Andersen Consulting and more than 20 participating vendors. Andersen Consulting Engineering Systems (ACES) is a model of an engineering control system that supports companywide product development cycles. AC - the Retail Place is a fully operational model of a retail store. The Factory is a display of computer-integrated manufacturing and distribution technology. GeoPlus focuses on geoprocessing information systems.

- Sao Paulo: The CIM Process Center applies technology to the process manufacturing industry, including process control networks, computer-aided plant design, and robotic bottling.

Training

Andersen Consulting invested $157 million ($7,200 per consultant) on training during fiscal 1991.

Through the Professional Education Division, more than 250 courses are available to each Andersen Consulting consultant. By the time a consultant reaches the associate partner level, he or she will have put in more than 1,000 hours of training.

· The St. Charles (IL) Center for Professional Education is the organization's hub for internal training that has 120 classrooms accommodating more than 2,000 participants.

· Other worldwide training locations include Manila, Philippines, Singapore, and Veldhoven (the Netherlands).

Key Products and Services

INPUT estimates that approximately 65% of Andersen Consulting's fiscal 1991 revenue was derived from systems integration, 30% from professional services, 4% from applications software products, and 1% from systems software products.

Andersen Consulting's areas of expertise include the following:

· *Systems Integration:*

- Systems planning
- Systems design

Copyright 1991 by INPUT. Reproduction Prohibited.

- Systems building
- Systems implementation

· *Systems Management*:

- Operations and network services
- Facilities management (systems operations)
- Applications management
- Backup/recovery services

· *Strategic Services*:

- Competitive and market strategy
- Organization and change strategy
- Business operations strategy
- Information and technology strategy

· *Change Management Services:* This practice answers business needs related to all aspects of implementing and managing organizational change. Using a practice methodology that encompasses planning, designing, implementing, and maintaining the changes made, each of three integrated service lines addresses the essential ingredients of change:

- The organization (Organization Change)
- The individual (Knowledge Transfer)
- Use of technology (Technology Assimilation)

Systems Integration:

Through the Systems Integration practice, Andersen Consulting plans, designs, and puts together complex computer systems, and then integrates them into a client's operations. These projects may require the design and installation of systems using custom-designed software, expertise in project management, and change management computer-based training. Projects may be partially managed at the client site, supplemented by Andersen's advanced technology centers.

Contract examples include the following:

· Andersen Consulting is a systems integrator in an effort to develop an optical document image processing system for the Ontario (Canada) Ministry of Consumer and Commercial Relations. The system will capture the province's 10 million statistical records.

Copyright 1991 by INPUT. Reproduction Prohibited.

- Andersen Consulting helped Northwest Airlines integrate artificial intelligence, image processing, workstations, and other technologies to create a system that helps Northwest more accurately track passenger revenue and collect marketing information about customers' travel and spending patterns.

- For the 1992 Winter Olympics, Andersen Consulting has integrated the computer systems that will administer operations, results reporting, ticket selling, lodging, accreditation, and other functions.

- Andersen Consulting is one of three firms participating in the installation of a new accounting system for the state of Texas. Andersen will develop an executive information system decision support tool for the system.

- An integrated financial and administrative system is currently being developed for the U.S. Social Security Administration. The project is expected to be complete some time in 1993, having lasted 60 months at a cost of $12 million.

- The Paris Bourse, the fourth largest stock exchange in the world, is carrying out a project to modernize its clearing and settlement procedures. Andersen Consulting's contract includes the interconnection of 300 banks and 50 brokers with the capacity to handle 600,000 transactions every day.

- Andersen Consulting was hired by the Swiss Options and Financial Futures Exchange (SOFFEX) to plan and implement the SOFFEX exchange from scratch. Andersen Consulting was engaged as the prime contractor to open a Swiss options and futures exchange, develop/install an electronic trading and clearing system to link directly with member back offices, and manage other areas necessary to open the exchange.

Systems Management:

Systems Management encompasses operations and network services, facilities management, applications management, software reengineering and renewal, and backup and recovery. Systems Management takes care of the daily needs of a client's systems so that the client can focus on its business. This service line is responsible for outsourcing deals in which a client turns over part or all of its data processing operations to Andersen Consulting.

Work in this practice area includes the following agreements:

Copyright 1991 by INPUT. Reproduction Prohibited.

- A $200 million, 10-year agreement with Sun Refining & Marketing Co., under which Andersen Consulting acquired Sun R&M's Dallas Computer Center, hired its employees, and assumed management of all Dallas Computer Center's operations. (Contract signed October 1990).

- A $50 million agreement with Voluntary Hospitals of America Inc. to install and manage a computer system that provides physicians and management at VHA member hospitals with comparative information on the cost and quality of patient care--even if their billing systems are different. (Contract signed fall 1990).

- Under a three-year, $10 million contract, Andersen Consulting is managing the Medical Data Center of the Milwaukee County Medical Complex. Andersen is responsible for computer operations, applications maintenance, technical support, and applications development. (Contract awarded in September 1991).

- Under a five-year, $89 million systems management contract, Andersen Consulting has assumed all of British Petroleum Exploration Europe's (BPX) financial accounting services. In addition, BPX's 250 accounting services staff have been offered positions with Andersen Consulting and will be located in Aberdeen (Scotland).

- In January 1990, Andersen Consulting agreed to provide IBM SNA network support, systems software maintenance, and technical support for Dial Corp.'s applications programming staff. As part of this $10 million, five-year deal, Andersen Consulting agreed to manage Dial's data center in Phoenix and migrate operations to its Dallas systems operations center.

This service line is supported by large processing centers (called systems management centers) in cases where it makes sense to perform systems operations away from the client site.

- Systems management centers are large, mainframe computer facilities staffed with systems specialists for use in some situations where a client has turned over part or all of its computer operations to Andersen Consulting.

Strategic Services:

Strategic Services helps clients develop market-driven strategies and align their business processes with those strategies in order to deliver value to customers.

Copyright 1991 by INPUT. Reproduction Prohibited.

Examples of work performed by the practice include the following:

- Competitive/market strategy: For a manufacturer of outdoor power equipment, Andersen Consulting developed and implemented a customer-driven strategic marketing plan and consumer strategy for the 1990s.

- Organization and change strategy: Andersen Consulting helped a public transportation system make the transition from state administration to local control. Andersen planned the transition and designed a new organization.

- Business operations strategy: For a multibillion dollar business unit of a major process manufacturer, Andersen Consulting streamlined the supply chain to simplify and speed the flow of products from manufacturer to distributor.

- Information and technology strategy: For a newly merged food products company, Andersen Consulting developed a strategy for integrating operations and information technology of the two previously separate businesses.

Change Management Services:

The Change Management Services practice helps organizations manage all elements of change.

- The philosophy behind change management is that the successful use of new technology depends on an organization's ability to properly position, educate, and motivate its people to employ it.

- Using methodologies and frameworks for planning, designing, implementing, and maintaining change, Andersen Consulting seeks to help organizations develop well-organized, well-informed, highly skilled, and highly motivated people at all levels.

Client examples include the following:

- Andersen Consulting planned, designed, and developed technology-based training for the U.K. Department of Social Security in support of its migration from a pencil-and-paper operation to an automated networked environment.

- Andersen Consulting helped the Standard Chartered Bank of Hong Kong to revamp the bank's transactions systems throughout Asia. Andersen developed computer-based training for more than 3,000 employees to offer simulated practice and

Copyright 1991 by INPUT. Reproduction Prohibited.

testing of more than 70 bank functions affected by the new system.

Services Support:

Andersen Consulting's services are supported through two types of facilities--sytems management centers amd advanced technology centers--and network management services.

Systems management centers (previously discussed) are large, mainframe computer facilities that support systems operations services.

Advanced technology centers (ATCs) are staffed with technology specialists, workstations, and computer networks to provide client support, marketing support, and research and development. The skills and knowledge of specialists at ATCs can be shared on multiple client projects, as opposed to having resources tied to one long-term engagement.

Andersen Consulting's Network Solutions practice provides a range of network integration and network management consulting services to support the organization's systems integration and systems management activities.

- Network Solutions works with the Systems Management practice to identify potential outsourcing opportunities, orchestrate outsourcing arrangements, support client network migrations, and identify new network environments to better meet clients' changing information technology requirements.

- AANet is Andersen Consulting's primary telecommunications vehicle for meeting its information needs. In addition, AANet is available to support network outsourcing services. The network spans North America and provides coverage to Europe as well as select regions of Asia.

- In addition, Andersen Consulting has formed alliances with INFONET Services Corp. and SigmaNet to penetrate areas AANet does not access.

- Andersen Consulting continues to develop its network services capabilities, reflecting the organization's commitment to the network outsourcing market.

Copyright 1991 by INPUT. Reproduction Prohibited.

Applications Software Products:

DCS/Logistics is an on-line, integrated system that supports the customer service, distribution, and logistics management functions of medium-to-large manufacturing and distribution organizations.

- DCS/Logistics for the IBM System 370 has 14 application modules. DCS/Logistics for the VAX has nine modules.
- There are currently more than 175 DCS/Logistics installations.

MAC-PAC is an integrated, on-line distribution and manufacturing system that allows manufacturers to share information throughout their entire organization. The entire flow of information can be defined and managed--from customer order to manufacturing, raw material purchase, and distribution.

- MAC-PAC runs on IBM and compatible mainframes under DOS, MVS.
- There are currently more than 120 MAC-PAC installations.

MAC-PAC/D is a specialized, fully integrated manufacturing enterprise management system for aerospace and defense contractors and other project-oriented manufacturers.

- The MAC-PAC/D family of products includes: MAC-PAC/D (manufacturing), IPD (engineering), PROCUREMENT/D (procurement), FACTORY MANAGEMENT/D (shop floor), and FINANCE/D (cost and financial).
- The products run on IBM and DEC mainframes. FACTORY MANAGEMENT/D also runs on DEC VMS and Hewlett-Packard open architecture platforms.
- There are currently 75 MAC-PAC/D installations.

MAC-PAC for the IBM AS/400 is a fully integrated, on-line manufacturing, distribution, and financial system that operates in a single or multiplant environment.

- The system supports discrete, just-in-time/repetitive, make-to-order, job shop, or a combination of these manufacturing environments. Multilanguage and multicurrency features are also included.
- There are currently more than 600 installations.

Copyright 1991 by INPUT. Reproduction Prohibited.

PROCESS/1, introduced in 1991, is a fully integrated product for process industry manufacturers. The PROCESS/1 client/server architecture supports multinational operations and provides features such as multicurrency, multilanguage, and unit-of-measure conversion. PROCESS/1 is available for DEC VAX, VMS systems.

Andersen Consulting's Software Intelligence Group is responsible for gathering, evaluating, and disseminating information on applications software products and vendors; working closely with software vendors to enhance their existing products; informing firm personnel of new applications software products, enhancements to existing products, and software industry trends; helping clients benefit from the most current knowledge and most recent hands-on experiences of firm personnel who have worked with packaged software products; supporting firm professionals on client projects; and developing methodologies and tools to help ensure successful implementation of applications software-based systems.

- The group has implemented a number of relationships with software products companies through the OASIS program. This program provides Andersen Consulting with in-depth knowledge of the products of key software companies such as Dun & Bradstreet Software Services, SAP, Quality Software Products, PeopleSoft, and Lawson Associates. Andersen Consulting works on major projects implementing those companies' software products.

Computer-Aided Software Engineering Tools:

FOUNDATION is a CASE tool set for information systems development, including analysis, design, and programming. FOUNDATION allows integrated application development and execution on multiple hardware platforms and operating systems.

- FOUNDATION's components include the following:

 - METHOD/1 is a LAN-based automated methodology that provides a systems development framework--from information planning to production systems support. The methodology provides support and guidance for several different development options. The project management component, MANAGE/1, includes work plan generation, project estimating, and quality assurance. METHOD/1 is integrated with DESIGN/1 and PLAN/1 and is accessible on-line. As of early fiscal 1992 there were 715 METHOD/1 installations.

 - DESIGN/1 is a LAN-based set of analysis and design tools available in a number of environments. DESIGN/1

Copyright 1991 by INPUT. Reproduction Prohibited.

automates systems design tasks and techniques to improve productivity and design quality. Analysts and designers use DESIGN/1 to develop data flow diagrams, paint screens and reports, and perform conversational prototyping. The product is mouse-driven, provides an easily followed menu-driven structure, and facilitates the sharing of design data. DESIGN/1 supports the activities of METHOD/1 and can be customized to support other methodologies. As of early fiscal 1992, there were 915 DESIGN/1 installations.

- INSTALL/1 is a development environment and application generator for DEC, IBM, and Bull. INSTALL/1 provides portability and reuse across multiple platforms because INSTALL/1-generated applications do not contain platform-specific logic. INSTALL/1 also provides support for workstation-based generation and unit testing of on-line and batch applications, and a mainframe execution environment and services to support the development of batch applications. As of early fiscal 1992, there were 115 installations of INSTALL/1.

- PLAN/1 is an automated LAN-based tool set for information planning and engineering. PLAN/1 helps information systems professionals incorporate business strategies for planning systems development projects. Components include an information model, data model facility, decomposition diagram facility, data flow diagram facility, and matrix facility. As of early fiscal 1992 there were 25 installations.

- FOUNDATION for Cooperative Processing is an OS/2-based set of tools for developing peer-to-peer, client/server applications and distributed application processing, not just a frontware to existing applications. FOUNDATION for Cooperative Processing increases productivity through reuse of system components and facilitates maintenance by generating applications from a shared repository. Released in fiscal 1992, the product supports OS/2 Presentation Manager clients and LAN and MVS/CICS server environments. Expanded availability will occur throughout 1992. As of early fiscal 1992 there were 20 installations.

Designware for FOUNDATION is a cross between packaged software and custom-developed systems applications that provides a jump start on application development. Designware offerings include:

- CUSTOMER/1, a customer information model for the utilities industry

Copyright 1991 by INPUT. Reproduction Prohibited.

- WORK/1, work order management designware for the utilities industry
- INVEST/1, for institutional investors creating securities accounting and management systems
- LIFE/1, a suite of products, including planware (software for information planning) and designware, that supports the policy administration needs of life insurance companies

In order to get clients involved in software research and development, Andersen Consulting also operates ASSIST, a user's group of its applications software and development tools. ASSIST membership is open to any licensed user of Andersen Consulting software products worldwide.

Industry Markets

A two-year summary of revenue by industry market, as provided by Andersen Consulting, follows:

ANDERSEN CONSULTING
TWO-YEAR SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR			
	8/91		8/90	
	REVENUE $	PERCENT OF TOTAL	REVENUE $	PERCENT OF TOTAL
Products (a)	$971.0	43%	$834.5	44%
Financial services (b)	588.6	26%	486.1	26%
Government	283.2	12%	215.4	11%
Utilities	154.6	7%	115.3	6%
Telecom Industry Group	128.4	6%	105.7	6%
Health care	68.0	3%	47.0	3%
Other	62.5	3%	71.5	4%
TOTAL	**$2,256.3**	**100%**	**$1,875.5**	**100%**

(a) Includes aerospace and defense, airlines, discrete/repetitive manufacturing, energy, food/consumer packaged goods, general retail, and wholesale distribution.

(b) Includes retail financial services, financial markets, and insurance.

Copyright 1991 by INPUT. Reproduction Prohibited.

Geographic Markets

Approximately 48% of Andersen Consulting's fiscal 1991 revenue was derived from the U.S. and the remainder from international sources. A two-year summary of source of revenue follows:

ANDERSEN CONSULTING
TWO-YEAR GEOGRAPHIC SOURCE OF REVENUE SUMMARY
($ millions)

	FISCAL YEAR			
	8/91		8/90	
ITEM	REVENUE $	PERCENT OF TOTAL*	REVENUE $	PERCENT OF TOTAL*
Americas				
- U.S.	$1,089.2	48%	$999.3	53%
- Canada	52.3	2%	41.9	2%
- South America	46.0	2%	43.8	2%
- Mexico	5.6	–	2.9	–
	$1,193.1	52%	$1,087.9	57%
Europe/Middle East/ Africa/India	907.5	40%	662.8	35%
Asia/Pacific	155.7	7%	124.8	7%
TOTAL	**$2,256.3**	**100%**	**$1,875.5**	**100%**

* *Note: Does not add to 100% due to rounding.*

Andersen Consulting has 151 offices in 46 countries, including 75 offices in the Americas, 58 offices in Europe/Middle East/Africa/India, and 18 offices in Asia/Pacific.

Andersen Consulting's European operations were significantly expanded during 1989 with the acquisitions of Rossmore Warwick (U.K.), Computer Management Associates (Norway), and CMC Consultores (Spain).

Copyright 1991 by INPUT. Reproduction Prohibited.

ANDERSEN CONSULTING

Arthur Andersen & Co., S.C.
69 West Washington Street
Chicago, IL 60602
(312) 580-0069

George T. Shaheen, Managing Partner
Total Employees: 18,000
Total Revenue, Fiscal Year End
8/31/89 $1.44 billion

The Company

Andersen Consulting helps clients use information in all phases of their management activities--strategic, operational, and financial. The firm's scope of services ranges from computer systems design and installation and systems integration and systems management, to information planning, systems productivity consulting, strategic consulting, and change management. This work is performed for clients in almost every professional, business, and government sector.

Andersen Consulting strives to be the leader in empowering organizations (and individuals) to apply information technology for their competitive advantage.

- Andersen Consulting is a separate member firm of The Arthur Andersen Worldwide Organization which provides professional services conducted through two separate business units: Andersen Consulting for strategic services, integration services (e.g. systems integration and systems management), and change management services; and Arthur Andersen for audit/attest, tax, and other financial services.

- Andersen Consulting serves clients through 157 offices in 45 countries. More than 18,000 Andersen Consulting professionals are employed worldwide.

- In October 1988, Andersen Consulting was reorganized as a separate strategic business unit in order to create a clear, separate identity for the consulting practice.

- Andersen Consulting provides services in systems design and installation, systems integration, systems productivity consulting, information planning, strategic consulting, change management, and systems/network management (outsourcing). The firm also offers application software products that support manufacturing resource planning and control and distribution control/warehouse management, and markets and supports the

Copyright 1990 by INPUT. Reproduction Prohibited.

FOUNDATION™ computer-aided software engineering (CASE) software product.

Andersen Consulting's fiscal 1989 revenue reached $1.4 billion, a 30% increase over fiscal 1988 revenue of $1.1 billion. A five-year revenue summary follows:

ANDERSEN CONSULTING
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR					
ITEM	8/89	8/88	8/87	8/86	8/85	CAGR
Revenue	$1,443.0	$1,112.0	$838.4	$635.9	$477.3	32%
• Percent increase from previous year	30%	32%	32%	33%	22%	

Management attributes the company's growth to an expansion in the information technology and systems integration marketplace and an increasing need for companies to capture and sustain a competitive advantage in their industries. Andersen Consulting also attributes growth to the company's increased participation in the application software and CASE tools arenas.

Acquisitions include the following:

- In September 1989, Andersen Consulting acquired Rossmore Warwick, a 25-30 person British engineering firm that helps design new factories and new process lines.

- In July 1989, Andersen Consulting acquired Courseware, Inc. of San Diego (CA). Terms of the acquisition were not disclosed.

 - Courseware provides computer-based training and training support services to clients in insurance, data processing, communications, real estate, defense, aerospace, and travel, as well as state and federal government. The company had 60 employees at the time of the acquisition and 1988 gross fees of $5.2 million.

 - The operations of Courseware have been merged into Andersen Consulting's Change Management Services (CMS) practice.

- In January 1989, Andersen Consulting acquired McCormack & Dodge's PIOS manufacturing resource planning system. McCormack & Dodge employees who had worked on PIOS

Copyright 1990 by INPUT. Reproduction Prohibited.

development and marketing were offered positions with Andersen Consulting. Terms of the purchase were not disclosed.

- With an installed base of 75 sites, PIOS is used by a number of large defense contractors.

- The transaction is part of an agreement between McCormack & Dodge and Andersen Consulting under which the two firms will jointly sell McCormack & Dodge's Millenium financial and human resources software and Andersen Consulting's MAC-PAC family of manufacturing software products.

- Other 1989 acquisitions include:

 - Computer Management Associates, a consulting firm in Oslo (Norway)

 - Synerlogic, a Canadian consulting firm

 - CMC Consultores, a Spanish consulting firm

Key Products and Services

INPUT estimates approximately 65% of Andersen Consulting's fiscal 1989 revenue was derived from systems integration, 30% from professional services, 4% from application software products, and 1% from systems software products.

Andersen Consulting's areas of expertise include the following:

- Strategic Services include analyzing clients' marketplace and competitive position, identifying strategic alternatives, establishing a formal direction, and monitoring the execution of the strategy. Andersen Consulting assists in forming and managing the strategic planning process and providing marketing, competitive and organizational analyses, and conducting profit planning programs.

- Systems Integration and Systems Management Services include total system solutions and assistance throughout the system's life cycle, including:

 - Planning, design, application and systems software programming
 - Procedures and computer-based training
 - Hardware and communications acquisition and installation

Copyright 1990 by INPUT. Reproduction Prohibited.

- System management, system maintenance, project and systems management
- Implementation assistance, including a development methodology, productivity aids, customized packaged software, applications systems software programming, training, and project management

- The Change Management Services practice of Andersen Consulting works with organizations to position people, processes, and technology for maximum, continuous benefit. Using a practice methodology that encompasses planning, designing, implementing, and maintaining the changes made, each of three integrated service lines addresses the essential ingredients of change:

 - The organization (Organization Change)
 - The individual (Knowledge Transfer)
 - The integrated use of technology (Technology Assimilation)

Andersen Consulting's professional services include software development, consulting, and education and training.

- Andersen Consulting operates five Systems Operations Centers, which are large mainframe computer facilities staffed with project teams to run the day-to-day computer operations for an organization. These centers are located in Chicago, Dallas, London, Manila, and Stamford (CT).

- Andersen Consulting's Advanced Technology Centers are staffed with technical experts and project managers who use workstations and network PCs connected to these centers for the automation of the application development process for clients. Advanced Technology Centers are located in Chicago, Dallas, Madrid, and Stamford (CT).

- Andersen Consulting currently has three sites for its Business Integration Centers which specialize in industry- and function-specific technology. These centers serve as facilities where industry project teams from around the world build and demonstrate visions of the future through full-scale working technology exhibits (e.g. a factory floor or hospital of the future).

 - Business Integration Centers are located in Chicago, Dallas, and Atlanta, with planned sites in New York, Los Angeles, Houston, Sao Paulo, and Tokyo.

Copyright 1990 by INPUT. Reproduction Prohibited.

- At one Business Integration Center, Andersen Consulting has designed a minifactory (located in Chicago, IL) that displays CIM techniques. The minifactory integrates the products from 35 different companies and produces an aluminum casting that holds a printed circuit board and plastic connectors.

- Other technologies include expert systems, voice recognition, vision systems, Ethernet and MAP 2.1, personal workstations, touch screens, computer-aided design, computer-aided manufacturing, MRPII, group technology, robotics, material handling, cell control, computer numerical control, and bar code data collection.

- A second Business Integration Center, also located in Chicago, contains SMART Store 2000, a showcase of Andersen Consulting's vision for the food store of the future: Super Marketing through Applied Retail Technology. The exhibit incorporates state-of-the-art hardware and software applied by more than 20 participating vendors and addresses food industry management concerns about the future.

- Another Business Integration Center, Hospital of the Future (HotFut), is scheduled to open in May, 1990. HotFut represents Andersen Consulting's vision of the systems technologies that will support the health care delivery system of the 1990s. Located in Dallas, the exhibit will serve as a permanent site for Andersen Consulting and more than 20 participating vendors.

- Also located at the Dallas Infomart are The Retail Place and the IDEACENTER. The Retail Place is Andersen Consulting's fully operational Quick Response retail store. The exhibit demonstrates how Quick Response establishes new business strategies, relationships, and procedures to speed the flow of information and merchandise between retailers and manufacturers. The IDEACENTER is a working factory that shows manufacturing automation from order entry through distribution.

- In the area of systems management, Andersen Consulting's work includes the following:

 - In January 1990, the company received a five-year, $10 million contract with Dial Corp. to provide IBM SNA network support, systems software maintenance, and technical support for Dial's applications programming staff,

Copyright 1990 by INPUT. Reproduction Prohibited.

in addition to mainframe operations. Initially, Andersen Consulting will manage Dial's data center in Phoenix, and later will migrate operations to Andersen Consulting's data center in Dallas.

- Other current U.S.-based systems management contracts are held by Andersen Consulting with Wickes Furniture, Chicago Tile, Maxxus, and United Medicorps.

- U.K.-based systems management clients include Standard Chartered Bank, Greenall Whitley (brewers), Yorkshire Health Authority, part of the Department of Social Security, DRG, and Banque Belge.

Andersen Consulting's systems integration staff offers professional services, packaged software, and customized software. Contract examples include the following:

- Andersen Consulting is one of three firms participating in the installation of a new accounting system for the state of Texas. Andersen Consulting will develop an executive information system decision support tool for the system.

- In January 1990, Andersen Consulting formed an agreement with Inference Corporation, whereby Andersen Consulting will have access to Inference's expert system tools.

- Andersen Consulting was hired by the Swiss Options and Financial Futures Exchange (SOFFEX) to plan and implement the SOFFEX exchange from scratch. Andersen Consulting was engaged as the prime contractor to open a Swiss options and futures exchange, develop/install an electronic trading and clearing system to link directly with member back offices, and manage other areas necessary to open the exchange.

- The Paris Bourse, the fourth largest stock exchange in the world, is carrying out a project to modernize its clearing and settlement procedures. Andersen Consulting's contract includes the interconnection of 300 banks and 50 brokers with the capacity to handle 600,000 transactions every day. The software alone involves 700 programs. The system is scheduled for completion in December 1990.

- A computer-aided layout and fabrications system was established for Lockheed. The project was completed in 1987, lasted 10 months, and cost $3 million.

Copyright 1990 by INPUT. Reproduction Prohibited.

- An order entry and inventory control system was designed and implemented for Ashland Chemical. The project was completed in 1989 at a cost of $5.5 million.

- An integrated financial and administrative system is currently being developed for the U.S. Social Security Administration. The project is expected to be completed some time in 1993, having lasted 60 months at a cost of $12 million.

- Andersen Consulting has various alliances, including those with Comshare, IBM, Hewlett-Packard, SAP, DEC, AT&T, Texas Instruments, Sun Microsystems, Olivetti, Wang, and Motorola, and expects more alliance activity in the future.

 - In late 1989, Andersen Consulting became an remarketer of Sun Microsystems' entire line of computers and software. A newly formed unit, New Age Systems Group, will handle Sun-based commercial integration projects.

A central Application Products Organization markets and supports Andersen Consulting's software products, coordinates artificial intelligence and telecommunications centers of expertise in support of client projects, and operates a software intelligence group.

- Responsibilities include gathering, evaluating, and disseminating information on application software products and vendors; working closely with software vendors to enhance their existing products; informing company personnel of new application software products, enhancements to existing products, and software industry trends; helping clients benefit from the most current knowledge and most recent hands-on experiences of company personnel who have worked with packaged software products; supporting company professionals on client projects; and developing methodologies and tools to help ensure successful implementation of application software-based systems.

- The Andersen Consulting Research Center has implemented a number of relationships with software products companies through the OASIS program. This program provides Andersen Consulting with in-depth knowledge of the products of key software companies such as Management Science America, SAP, IBM, American Software, and McCormack & Dodge. Andersen Consulting works on major projects implementing these companies' software products.

Copyright 1990 by INPUT. Reproduction Prohibited.

Andersen Consulting offers the following application software products:

- MAC-PAC, released in 1986, integrates distribution and manufacturing functions on-line in a multiwarehouse/multiplant or single warehouse/plant environment. The system supports the materials planning, just-in-time (JIT), distribution requirements planning, and computer-integrated manufacturing operations of discrete, repetitive, and process industries.
 - Its applications include design engineering, manufacturing engineering, order processing, inventory accounting, card order and bring-out notice (CONBON®), and capacity planning.
 - The system runs on IBM 937X, 43XX, and 30XX mainframes in an MVS or VSE operating environment. There are currently 115 installations.
- MAC-PAC/D, introduced in 1983, is a specialized, fully integrated manufacturing enterprise management system for aerospace and defense contractors and other project-oriented manufacturers.
 - MAC-PAC/D supports major U.S. Department of Defense information requirements, including configuration management, contract material planning and control, and contract cost accounting.
 - MAC-PAC/D is composed of three major application systems: MAC-PAC/D (manufacturing and engineering), PROCUREMENT/D™ (purchasing), and FACTORY MANAGEMENT/D™ (shop floor).
 - MAC-PAC/D's architecture supports real-time communication with a computer-integrated manufacturing network. The product runs on IBM mainframes in an MVS or VSE operating environment and DEC mainframe computers. There are currently more than 45 installations.
- MAC-PAC for the IBM AS/400 is a fully integrated, on-line manufacturing, distribution and financial system that allows users to operate in a full manufacturing resource planning (MRPII), JIT, or mixed MRP/JIT environment.
 - Key applications include item definition, master scheduling, inventory control, shop floor control, product costing, sales

Copyright 1990 by INPUT. Reproduction Prohibited.

analysis, and general ledger. Recently, Andersen Consulting added an artificial intelligence-based expert configurator application module to the system.

- MAC-PAC for the IBM AS/400 operates in the IBM AS/400 environment and currently runs on the IBM System/38. There are more than 300 installations of MAC-PAC for the IBM AS/400 (including System/38 installations).

- PIOS (Production and Inventory Optimization System), acquired from McCormack & Dodge in 1989, is an on-line manufacturing control system that runs on IBM mainframes under OS, DOS, and MVS operating systems. PIOS also runs under the DEC VAX-11/780 system and under larger systems in the VMS environment. PIOS has been installed at 75 sites. A number of large defense contractors use the product.

- DCS/Logistics manages customer service and logistics functions. It consists of modules for order processing, inventory and warehouse management, outbound logistics, distribution requirements planning, accounts receivable, and replenishment.

 - The product runs on IBM System/370 architecture in an MVS or VSE operating environment. An IBM DB2 version is also available.

 - There are currently 144 DCS/Logistics active sites. The product is marketed to clients in a range of industries.

 - A 1988 agreement with Telxon, a supplier of radio frequency handheld devices, has enabled Andersen Consulting to market DCS/Logistics with Telxon's products to consumer products/distribution clients.

 - Andersen Consulting has integrated DCS/Logistics with Telxon's portable workstations, which combine on-line, radio-linked computer systems and handheld units for real-time use in factories and warehouses.

 - The agreement will also enable Andersen Consulting to work with Telxon's in-store software systems for point-of-sale connectivity, labor management, inventory management, direct store delivery, receiving, and store management.

- The prices of Andersen Consulting's software products vary by application modules and hardware selected.

Copyright 1990 by INPUT. Reproduction Prohibited.

In March 1988, Andersen Consulting announced the availability of FOUNDATION, an integrated software development environment designed to support and automate the entire life cycle of application software development. FOUNDATION supports the planning, design, installation, and maintenance of mission-critical applications for a variety of systems, including IBM CICS and IMS/DC, DEC, and BULL.

- FOUNDATION's components include the following:
 - METHOD/1[R] is the PC-based, on-line, life cycle methodology that supports information planning, custom and iterative development, packaged systems implementation, and product systems support. METHOD/1 can be tailored to meet an organization's requirements for project management, work planning, estimating, scheduling, and change management.
 - METHOD/1 requires at least an IBM AT, PS/2, or compatible with 40 Mbyte hard disk, 640K of main memory, Expanded Memory LIM 3.2 or 4.0 (recommended), a system printer, and DOS Version 2.1 or later.
 - METHOD/1 is priced at $50,000 for a site license. There are currently 610 installations.
 - DESIGN/1[R] is a PC-LAN-based set of software tools that automates systems design tasks and techniques to improve productivity and design quality. DESIGN/1 is used by analysts and designers to develop data flow diagrams, paint screens and reports, and perform conversational prototyping. The product is mouse-driven, provides an easily followed menu-driven structure, and facilitates the sharing of design data. DESIGN/1 supports the activities of METHOD/1 and can be customized to support other methodologies.
 - DESIGN/1 requires at least an IBM AT, PS/2, or compatible with 10 Mbyte hard disk, 640K of main memory, Expanded Memory LIM 3.2 or 4.0 (recommended), and DOS Version 2.1 or later.
 - DESIGN/1 is priced at $7,000 for the first site and $43,000 for a site with 40 users.
 - There are currently 520 DESIGN/1 sites.

Copyright 1990 by INPUT. Reproduction Prohibited.

- DESIGN/1 is also available for developing cooperative processing and CUA-compliant Presentation Manager applications. DESIGN/1 for cooperative processing requires an IBM PS/2 model 70, P70, or 80 (or compatible 386-based computers) with 10 Mbyte hard drive, 8 Mbyte memory, Microsoft or compatible mouse, IBM OS/2 Version 1.1 SE with corrective services level WR034042.

- INSTALL/1[R] is the mainframe environment for implementation and support of on-line and batch applications. It contains an extendible, active data repository built on a relational data base system. INSTALL/1 provides facilities that assist in screen and dialogue design, program generation, test data management, data and data base administration, and support of production systems. Design data can be uploaded from DESIGN/1 to INSTALL/1 environment's data repositories. This provides a common development environment, regardless of execution platform.

 - INSTALL/1 is available on IBM CICS and IMS/DC, DEC, and BULL platforms.

 - INSTALL/1 is priced at $200,000 for a single site. There are currently 40 installations.

- By December 1990, the cooperative version of FOUNDATION will be available, enabling the design and generation of peer-to-peer, cooperative processing applications based on the OS/2 Presentation Manager and MVS platforms. FOUNDATION will also include a planning toolset that runs under IBM's Presentation Manager environment and provides an information engineering approach to the planning stages of systems development. Other areas of development include re-engineering, artificial intelligence, and knowledge-based systems.

- Worldwide revenues from FOUNDATION reached more than $15 million in fiscal 1989, compared to $3.8 million in fiscal 1988.

ASSIST (A Shared Solution In Software Technology) is a user group that combines the four previous user's groups--MAC-PAC, METHOD/1, DCS, and System/38 users--into one.

- The purpose of this organization is to provide feedback to Andersen Consulting in an effort to guide future development activities.

Copyright 1990 by INPUT. Reproduction Prohibited.

- ASSIST membership is open to any licensed user of Andersen Consulting software products worldwide.

Industry Markets

Andersen Consulting's fiscal 1989 worldwide revenue was derived approximately as follows:

Manufacturing and Industrial Products	18%
Consumer Products	18%
Banking	13%
Government	11%
Insurance	7%
Telecommunications	7%
Utilities	5%
Energy and Gas	5%
Capital Markets	6%
Health Care	4%
Other	6%
	100%

Geographic Markets

Approximately 61% of Andersen Consulting's fiscal 1989 revenue was derived from the Americas; 32% from Europe, Africa, and the Middle East; and 7% from Asia and the Pacific Basin.

Andersen Consulting has 72 offices in the Americas, 53 offices in Europe, Africa, and the Middle East, and 32 offices in Asia and the Pacific Basin.

Computer Hardware and Software

Andersen Consulting has the following computers installed in support of its professional staff:

- IBM 3090, 3081, 4381, 9370, System/38, and AS/400 systems
- DEC VAX 6220, 6310, and MicroVAX systems
- Symbolics systems
- Wang systems
- A variety of microcomputers from IBM, Compaq, Sun Microsystems, Apple, GRID, Toshiba, and Zenith

AANet is a proprietary worldwide integrated voice and data network for internal and client use. It provides virtual access to Advanced Systems Centers from remote development sites. AANet also links together the Advanced Systems Centers for use in systems management contracts.

Copyright 1990 by INPUT. Reproduction Prohibited.

ANDERSEN CONSULTING
69 West Washington Street
Chicago, IL 60602
(312) 550-0069

Stanley L. Cornelison, Managing Partner
Unit of Arthur Andersen & Co.
Total Employees: 14,000
Total Revenue, Fiscal Year End
8/31/88: $1.11 billion

The Company

Andersen Consulting helps clients use information in all phases of their management activities--strategic, operations, and financial. The group assists in the planning, design, and installation of computer-based information systems of all types and sizes for clients in almost every professional, business, and government sector.

- Andersen Consulting is part of The Arthur Andersen Worldwide Organization, which provides professional services in accounting and audit, tax, professional education, and management information consulting to clients through 231 offices in 49 countries. The firm achieved revenue of $2.82 billion in fiscal 1988 and employs more than 45,000 professionals worldwide.

- In October 1988, Arthur Andersen & Co. announced its Management Information Consulting practice had been renamed Andersen Consulting in order to create a clear, separate identity for the firm's consulting services.

- Andersen Consulting provides services in systems design and installation, systems integration, systems productivity consulting, information planning, strategic consulting, change management, and facility/network management. The firm also offers application software products that support manufacturing resource planning and control and distribution control/warehouse management and markets and supports the FOUNDATION™ computer-aided software engineering (CASE) software product.

Andersen Consulting's fiscal 1988 revenue reached $1.1 billion, a 32% increase over fiscal 1987 revenue of $838.4 million. A five-year revenue summary follows:

Copyright 1989 by INPUT. Reproduction Prohibited.

ANDERSEN CONSULTING
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR				
ITEM	8/88	8/87	8/86	8/85	8/84
Revenue	$1,112.0	$838.4	$635.9	$477.3	$391.8
• Percent increase from previous year	32%	32%	33%	22%	19%

Management attributes the company's growth to an expansion in the information technology and systems integration marketplace and an increasing need for companies to capture and sustain a competitive advantage in their industries. Andersen also attributes growth to the company's increased participation in the application software and CASE tools arenas.

Acquisitions include the following:

- In January 1989, Andersen Consulting acquired McCormack & Dodge's PIOS manufacturing resource planning system. McCormack & Dodge employees who had worked on PIOS development and marketing will be offered positions with Andersen Consulting. Terms of the purchase were not disclosed.

 - With an installed base of 75 sites, PIOS is used by a number of large defense contractors.

 - The transaction is part of an agreement between McCormack & Dodge and Andersen Consulting under which the two firms will jointly sell McCormack & Dodge's Millenium financial and human resources software and Andersen Consulting's MAC-PAC family of manufacturing software products.

- In May 1988, Arthur Andersen and Co. acquired direct/data base marketing specialist, Kestnbaum & Company.

 - This association focuses in four areas: strategic, advanced marketing analysis, quantitative analysis, and high-level data base design and system functional specification.

 - Kestnbaum will provide selected Andersen offices with proposal development and quality assurance; develop and

Copyright 1989 by INPUT. Reproduction Prohibited.

implement training for Andersen partners, managers, and Kestnbaum consultants; and monitor and increase productivity.

Andersen Consulting's major competitors include the Big 8 accounting firms' professional services units, as well as the leading systems integrators and professional services vendors such as IBM, Computer Sciences Corporation, Electronic Data Systems, Computer Task Group, AGS/NYNEX, and DEC. In the strategic services arena, Andersen Consulting's major competitors include McKinsey & Co., Booz-Allen, and Bain & Co.

Key Products and Services

Approximately 55% of Andersen Consulting's fiscal 1988 revenue was derived from professional services, 40% from systems integration, 3% from application software products, and 2% from systems software products.

- Areas of expertise include the following:
 - Strategic services
 - Information planning
 - Systems design and installation
 - Software products and services
 - Change management
 - Facilities/network management

Andersen Consulting's professional services include software development (70%), consulting (15%), and education and training (15%).

- Andersen Consulting operates five Advanced Systems Centers, which are large IBM computer facilities staffed with technical experts and project managers. Project teams use workstations connected to these centers for the automation of the application development process for each client.

- Associated with the Advanced Systems Centers are Advanced Technology Centers. These centers specialize in industry- and function-specific technology, and each has a working demonstration of the technology (e.g. a factory floor or engineering design department).
 - At one Advanced Technology Center, Andersen Consulting has designed a minifactory (located in Evanston, IL) that displays CIM techniques. The minifactory integrates the products from 35 different companies and produces an

Copyright 1989 by INPUT. Reproduction Prohibited.

aluminum casting that holds a printed circuit board and plastic connectors. Other centers are located near Dallas and Los Angeles.

- Other technologies include expert systems, voice recognition, vision systems, Ethernet and MAP 2.1, personal workstations, touch screeens, computer-aided design, computer-aided manufacturing, MRP II, group technology, robotics, material handling, cell control, computer numerical control, and bar code data collection.

- Additional Advanced Technology Centers are planned for the capital markets, insurance, and health care industries.

- A central Technical Services Organization (TSO) markets and supports the firm's software products, coordinates artificial intelligence and telecommunications centers of expertise in support of client projects, and operates a software intelligence group.

 - Responsibilities include gathering, evaluating, and disseminating information on application software products and vendors; working closely with software vendors to enhance their existing products; informing firm personnel of new application software products, enhancements to existing products, and software industry trends; helping clients benefit from most current knowledge and most recent hands-on experiences of firm personnel who have worked with packaged software products; supporting firm professionals on client projects; and developing methodologies and tools to help ensure successful implementation of application software-based systems.

 - The software intelligence group has implemented a number of relationships with software products companies through the OASIS program. This program provides Andersen Consulting with in-depth knowledge of the products of key software companies such as Management Science America, SAP, IBM, American Software, Cullinet, and McCormack & Dodge. Andersen Consulting works on major projects implementing these companies' software products.

Andersen Consulting's systems integration staff offers professional services (57% of SI revenue), hardware equipment (30% of SI revenue), packaged software (8% of SI revenue), and customized software (5% of SI revenue).

Copyright 1989 by INPUT. Reproduction Prohibited.

- Contract examples include the following:
 - A computer-aided layout and fabrications system for Lockheed. The project was completed in October 1987, having lasted ten months and cost $3.0 million.
 - An order entry and inventory control system designed and implemented for Ashland Chemical. The project is expected to be completed in 1989 at a cost of $5.5 million.
 - A cost recovery system for the California Department of Developmental Services. The project is expected to be completed in October 1989, having lasted 17 months at a cost of $3.6 million.
 - An integrated financial and administrative system for the Social Security Administration. The project is expected to be completed some time in 1993, having lasted 60 months at a cost of $12.0 million.

Andersen Consulting offers the following application software products:

- MAC-PAC^{R}/CIM is a manufacturing resource planning (MRP II) system that links manufacturing software systems with automation equipment.
 - MAC-PAC/CIM components include MAC-PAC/D and MAC-PAC/JIT.
 - MAC-PAC/D, introduced in 1983, is an integrated, on-line MRP II and control system for aerospace and defense contractors. MAC-PAC/D supports major DOD information requirements, including configuration management, contract material planning and control, and contract cost accounting. MAC-PAC/D's architecture supports real-time communication with a CIM network. There are currently 30 installations.
 - MAC-PAC/JIT, released in 1986, provides single-system control of MRP II and Just-in-Time (JIT) systems. MAC-PAC/JIT features include rate planning; automatic rescheduling; cell schedules; electronic communication with suppliers; point-of-use allocation; card order notice, bring out notice (CONBON^{R}); bar coded part reporting; cost accounting; and deduct point relief. There are currently 115 installations.

Copyright 1989 by INPUT. Reproduction Prohibited.

- The MAC-PAC software systems are marketed for the IBM AS/400, System 38, 360, 370, 9370, 30XX, and 43XX/DOS/VSE/AF, and MVS/370 and MVS/XA compatibles. There are currently over 600 installations.

- PIOS (Production and Inventory Optimization System), acquired from McCormack & Dodge earlier this year, is an on-line manufacturing control system that runs on IBM mainframes under OS, DOS, MVS and DEC VAX-11/780 and larger systems under VMS.

- DCS™/Logistics manages customer service and logistics functions. It consists of modules for order processing, inventory and warehouse management, outbound logistics, DRP (distribution requirements planning), accounts receivable, and replenishment.

 - The product runs on IBM 9370, 43XX, and 30XX systems. An IBM DB2 version is also available. There are currently 150 DCS/Logistics installations.

 - DCS/Logistics is marketed to clients in a range of industries.

 - In October 1988, Andersen Consulting and Telxon announced a cooperative marketing agreement allowing the marketing of DCS/Logistics with Telxon's family of radio frequency handheld communication devices to clients in the consumer products/distribution industries.

 - Andersen Consulting has integrated DCS/Logistics with Telxon's portable workstations, which combine on-line, radio-linked computer systems and handheld units for real-time use in factories and warehouses.

 - It will also include Telxon's in-store software systems for point-of-sale connectivity, labor management, inventory management, direct store delivery, receiving, and store management.

- CQMS™, Cost Quality Management System, is a DEC MicroVAX-based management system for hospitals that integrates clinical and financial data for planning and decision making.

 - The Information Integrator module combines a hospital's clinical data with the financial data merged with information from other hospitals. Internal cost and quality analyses can be made and compared to other healthcare institutions.

Copyright 1989 by INPUT. Reproduction Prohibited.

- Cost Advantage provides tools for cost standards development, department performance monitoring, budgeting, and product line management.

- The prices of Andersen Consluting's software products vary by application modules and hardware selected.

In March 1988, Arthur Andersen & Co. announced the availability of FOUNDATION, an integrated software development environment designed to support and automate the entire life cycle of application software development. FOUNDATION supports the planning, design, installation, and maintenance of mission critical applications for IBM DB2 systems.

- FOUNDATION's components include the following:

 - METHOD/1™ is the PC-based, on-line, life cycle methodology that supports information planning, custom and iterative development, packaged systems implementation, and product systems support. METHOD/1 can be tailored to meet an organization's requirements for project management, work planning, estimating, scheduling, and change management.

 - METHOD/1 requires at least an IBM PC, XT, or AT with 20 mbyte hard disk, 512K of main memory, a system printer, and DOS Version 2.1 or later.

 - METHOD/1 is priced at $50,000 for a single site. There are currently 535 installations.

 - DESIGN/1™ is a PC-LAN-based set of software tools that automates systems design tasks and techniques to improve productivity and design quality. DESIGN/1 is used by analysts and designers to develop data flow diagrams, paint screens and reports, and for conversational prototyping. The product is mouse-driven, provides an easily followed menu-driven structure, and facilitates the sharing of design data. DESIGN/1 supports the activities of METHOD/1 and can be customized to support other methodologies.

 - DESIGN/1 requires at least an IBM PC with two 360K disk drives, IBM XT or AT, or compatibles, 512K of main memory, and DOS Version 2.1 or later.

 - DESIGN/1 is priced at $7,000 for the first site and $43,000 for a site with 40 users.

Copyright 1989 by INPUT. Reproduction Prohibited.

- There are currently 5,000 DESIGN/1 installations.

- INSTALL/1™ is the mainframe environment for implementation and support of applications based on CICS, COBOL II, and DB2. It contains an extensible, active data repository built on IBM's DB2 relational data base system. INSTALL/1 provides facilities that assist in screen and dialogue design, program generation, test data management, data and data base administration, and support of production systems. Design data can be uploaded from DESIGN/1 to INSTALL/1's data repository.

 - INSTALL/1 runs on IBM and compatible mainframes under MVS/XA, DB2, CICS, TSO/ISPE, COBOL II, or OS COBOL.

 - INSTALL/1 is priced at $200,000 for a single site. There are currently 15 installations.

- There are currently over 650 FOUNDATION clients.

- The firm estimates that worldwide revenues from FOUNDATION reached approximately $28 million in fiscal 1988 and anticipates that fiscal 1989 revenue from FOUNDATION will reach $57 million.

ASSIST (A Shared Solution In Software Technology) is a user's group that combines the four previous user's groups-- MAC-PAC, METHOD/1, DCS, and System/38 users--into one.

- The purpose of this organization is to provide feedback to Andersen Consulting in an effort to guide future development activities.

- Assist membership is open to any licensed user of Andersen Consulting software products worldwide.

Industry Markets

Andersen Consulting's fiscal 1988 revenue was derived approximately as follows:

Copyright 1989 by INPUT. Reproduction Prohibited.

Manufacturing and industrial products	22%
Consumer products	19%
Federal government	14%
Banking	13%
Insurance	6%
Capital markets	6%
Health care	5%
Utilities	5%
State and local government	5%
Telecommunications	1%
Energy and gas	1%
Other	3%
	100%

Geographic Markets

Approximately 57% of Andersen Consulting's fiscal 1988 revenue was derived from the U.S.; 32% from Europe; 7% from Japan, Australia, and the Pacific Basin; 2% from Mexico and Central and South America; 1% from Canada and Bermuda; and 1% from the Middle East, Africa, and India.

Andersen Consulting has 41 offices in the U.S. and Puerto Rico.

Andersen Consulting has 61 international offices.

Computer Hardware and Software

Andersen Consulting has the following computers installed in support of its professional staff:

- IBM 3090, 3081, 4381, 9370, System/38, and AS/400 systems.
- DEC VAX 6220, 6310, and MicroVAX systems.
- Symbolics systems.
- Wang systems.
- A variety of microcomputers from IBM, Compaq, Sun Microsystems, Apple, GRID, Toshiba, and Zenith.

Copyright 1989 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

ANSTAT, INC.
1120 Avenue of the Americas
New York, NY 10036
(212) 840-6868

Leon Weisburgh, President
Public Corporation, OTC
Total Employees: 42
Total Revenues, Fiscal Year End
9/30/78: $2,100,000

THE COMPANY

- Incorporated in Delaware in 1970 by Leon Weisburgh, Anstat was founded as a remote computing services bureau.
- The company provides remote computing services to approximately 35 clients in wholesale distribution and discrete manufacturing.
- For the past three years Anstat has been growing at a compound rate of nearly 25% per year.
- Anstat is shifting its target market from users with a revenue range of $5 million to $50 million, to users with revenues from $10 million to $200 million. Anstat's entire marketing effort is currently directed at the manufacturing industry.
- New users will come from its traditional marketplace, the New York metropolitan area.
- Anstat has lost some clients to in-house small business systems. According to management, however, most of Anstat's new clients have replaced their in-house computers with Anstat services.
- A breakdown of Anstat's employees follows:

-	Marketing and Sales	1
-	Software Services/Customer Support	10
-	Computer Operations	17
-	General and Administrative	7
-	Communications	5
-	Research/Maintenance Programming	2

KEY PRODUCTS AND SERVICES

- Since spring 1971, Anstat has provided the following remote batch computing services to its clients: order processing, accounts payable and receivable,

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

invoicing, bill of materials handling, general ledger, product development. It does not offer either payroll or personnel services.

- These services generate 100% of Anstat revenues.

APPLICATIONS Anstat offers only general business application services.

INDUSTRY MARKETS In 1975, Anstat revenues were evenly distributed between the wholesale distribution and discrete manufacturing industries. In 1978, however, discrete manufacturing generated 85% of all revenues and wholesale distribution 15%.

GEOGRAPHIC MARKETS Anstat users have traditionally been and will continue to be located in the New York metropolitan area.

COMPUTER SOFTWARE AND HARDWARE Anstat uses two Burroughs B4700 mainframes, 2 DEC PDP-11/60s, and 5 DEC PDP-11/20s (to be disposed of in Spring, 1979) to provide its services. It also provides Hazeltine CRT terminals at client locations.

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

COMPANY HIGHLIGHT

ANSTAT, INC.
605 - 3rd Avenue
New York, N.Y. 10016
(212) 687-9393

Leon Weisburgh, President
Private corporation
Total employees: 35
Total revenues, fiscal year end 9/30/76: $1.5 million

COMPANY BACKGROUND:

- Incorporated in Delaware in 1960 by Leon Weisburgh, Anstat was founded as a remote computing services bureau.

- The company provides remote computing services and inhouse hardware to approximately 33 clients in wholesale distribution and discrete manufacturing.

OVERALL ASSESSMENT:

- In 1976 Anstat moved into the black. Until now, its $130,000 per month data center costs have outrun its revenues.

- The other most significant milestone in 1976, according to company management is the increased efficiency of the client training cycle. Although installations are now scheduled to take 6 months rather than 3 to 4, they are consuming fewer Anstat man days of effort and result in both more thoroughly trained user personnel and more productive Anstat personnel.

- Anstat is not aggressively expanding its services or its market penetration. It is shifting its target market from users with a revenue range of $5 million to $50 million to users with revenues in the $100 million range. Anstat's revenue base seems to be shifting strongly away from wholesale distributors toward the discrete manufacturing industry; not, however, as a result of corporate strategy.

- New users will come from its traditional marketplace; New York metropolitan area.

- Anstat has lost some clients to inhouse small business systems. It is competing against the intrusion by presenting current and potential clients with examples of underbid minicomputer installations.

COMPANY HIGHLIGHT/ANSTAT, INC.

KEY PRODUCTS AND SERVICES:

- Since spring 1971, Anstat has provided the following remote computing services to its clients: order processing, accounts payable and receivable, invoicing, bill of materials handling, general ledger, product development. It does not offer either payroll or personnel services.
- These services generate 100% of Anstat revenues.

APPLICATIONS: Anstat offers only general business application services.

INDUSTRY MARKETS: In 1975, Anstat revenues were evenly distributed between the wholesale distribution and discrete manufacturing industries. In 1977, however, discrete manufacturing will generate more than 80% of all revenues and wholesale distribution less than 20%.

GEOGRAPHIC MARKETS: Anstat users have traditionally been and will continue to be located in the New York metropolitan area.

COMPUTER SOFTWARE AND HARDWARE: Anstat uses two Burroughs B4700 mainframes and five DEC PDP 11/20s to provide its services. It also provides Hazeltine CRT terminals at client locations.

THE APL GROUP INC.
644 Danbury Road
Wilton, CT 06897
(203) 762-3933

George Brigham, President
Private Corporation
Total Employees: 20
Total Revenue, Fiscal Year End
12/31/90: $4,000,000*

*INPUT estimate

The Company

The APL Group was founded in 1983 by George Brigham and Daniel Codman for the sole purpose of developing software for electronic data interchange (EDI). The company's products and services include Qualedi[R] EDI PC-based translation software, annual software maintenance and customer support, EDI education, and EDI consulting.

The APL Group has targeted its PC product to be the premier PC-based translator for companies wanting to integrate EDI with existing software applications. These applications may be running on other than PC platforms.

- APL claims that the underlying relational data base structure of its EDI translator provides the flexibility to respond quickly to changes in the standards.
- The company has evidently secured financial backing to pursue its perceived market. New marketing and sales staff have been added.

The company reports that since 1987 its sales have grown 17% from quarter to quarter.

Key Products and Services

Approximately 75% of the company's revenue is derived from software products and 25% from professional services.

Qualedi, originally introduced in 1984, is a micro-based translation software product supporting all public EDI standards. The software is now at release nine (9).

- Qualedi has standards-compliance verification abilities. At each level of the EDI transmission (interchange level, group level, and transaction set level) QualEDI verifies that all data elements and segments adhere to the standards. If errors appear, they are reported and in some instances correctable.

Copyright 1991 by INPUT. Reproduction Prohibited.

- The product supports unattended scheduled operations.
- The Qualedi front-end acts as either a front-end to a mainframe or mini, or as a standalone workstation. It features modes for testing the mainframe interface and new correspondents. The front-end sells for $3,200.
- The Qualedi service bureau is an enhanced mode of the front-end. The user of the system is not the sender or receiver of the documents, as in the front-end mode, but serves instead as the service bureau for a number of internal correspondents who are the real senders and receivers. The user system is, in this case, an interface between multiple internal and multiple external correspondents.
- Data mapping capabilities allow for two types of record formats: fixed position and variable length.
- The multiple-correspondent workstation enables the PC to act as a standalone, key-entry terminal for sending and receiving EDI documents with any number of trading partners. The multiple-correspondent workstation sells for $2,700.
- The single-correspondent substation is used for communicating with only one correspondent, and sells for $1,650.
- Qualedi operates on any MS-DOS PC/XT-, AT- or 386-compatible microcomputer equipped with a serial port, an internal clock, 640K of RAM and 10-megabyte hard disk, a monochrome monitor, and an 80-character printer. A modem and communication software are required for communications.
- Qualedi supports the following standards: ANSI X12 (all industries, including CIDX, AIAG, CDX, VICS); UCS (grocery/retail); WINS (warehousing); TDCC (transportation); and EDIFACT (international).
- Data communications networks supported by the product include the following: BT North America, Transettlements, Sears Communication Company, Ford, Telecom Canada, AT&T, Ordernet, Kleinschmidt, GE Information Services, CompuServe, Railinc, and IBM Information Network (APL participates in the IBM Business Partner Program; it is on BT North America's Alliance Partner program; and it signed a national cooperation agreement for marketing, sales, and implementation with AT&T). Additionally, the software supports point-to-point implementations.

Copyright 1991 by INPUT. Reproduction Prohibited.

- Communications software supported by Qualedi is dependent on which of the 14 networks the customer uses.

The APL Group also provides professional services such as customization and consulting services, in addition to providing its customers with installation services, a tutorial demonstration, and hotline support. On-site installation/support/training costs $500 per day plus travel expenses. Monthly EDI education classes cost $250/day per person.

Strategic Alliances:

APL is strategically allied with Greentree Software (New York, NY) which produces CAP3 Computer Assisted Purchasing software. The alliance is intended to provide complete EDI capability to purchasing professionals.

APL is also allied with TanData Corporation (Tulsa, OK), a small package shipping software development corporation.

Industry Markets

Qualedi has been installed in 18 different industries, including retail, aerospace, grocery, telecommunications, airline, utility, chemicals, manufacturing, transportation, and distribution.

The product has generic capabilities that allow its use in any industry that has endorsed national standards.

Geographic Markets

The APL Group sells directly and through VAR distribution channels. VARs are responsible for approximately 10% of sales. The company has installations in the U.S. and Canada.

Copyright 1991 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

APPLICON
4251 Plymouth Road
P.O. Box 986
Ann Arbor, MI 48106
(313) 995-6000

Richard A. Mohrman, General Manager
Division of Computer-Aided Systems
Group of Schlumberger Technology
Corporation, a Wholly Owned
Subsidiary of Schlumberger Ltd.
Total Employees: 1,396
Total Revenue, Fiscal Year End
12/31/85: $159,300,000*

THE COMPANY

- The current Applicon organization was created in July 1985 from the combination of Applicon (Burlington, MA) and Manufacturing Data Systems Incorporated (MDSI) (Ann Arbor, MI) by Schlumberger Ltd. Both companies were founded in 1969 and were members of Schlumberger's Computer-Aided Systems Group, as is the new Applicon.

 - The former Applicon, acquired by Schlumberger in January 1982, specialized in computer-aided engineering, computer-aided design, and computer-aided manufacturing (CAE/CAD/CAM) systems for mechanical, electronics, and engineering applications.

 - MDSI, acquired by Schlumberger in January 1981, provided processing services, turnkey systems, and software products for CAM applications.

- Applicon currently provides CAE/CAD/CAM turnkey systems for mechanical, electronic, and very large-scale integration (VLSI) applications.

- INPUT estimates that Applicon's 1985 revenue (including the former Applicon and MDSI) reached $159.3 million. For comparative purposes, in the five-year revenue summary that follows results for 1984, 1983, 1982, and 1981 include the combined operations of the former Applicon and MDSI prior to their merging.

*INPUT estimate

©1986 by INPUT. Reproduction Prohibited.

APPLICON
FIVE-YEAR REVENUE SUMMARY*
($ millions)

ITEM \ FISCAL YEAR	1985	1984	1983	1982	1981
Revenue					
. Applicon	$ 159.3	$ 104.4	$ 102.4	$ 95.7	$ 84.0
- Percent increase from previous year	N/A	2%	7%	14%	25%
. MDSI	N/A	$ 47.6	$ 45.8	$ 54.5	$ 68.3
- Percent increase (decrease) from previous year	N/A	4%	(16%)	(20%)	15%
Total	$ 159.3	$ 152.0	$ 148.2	$ 150.2	$ 152.3
- Percent increase (decrease) from previous year	5%	3%	(1%)	(1%)	20%

*INPUT estimate

- As of December 31, 1985, Applicon had 1,396 employees. Currently, Applicon has approximately 1,250 employees, segmented as follows:

Marketing/sales	330
Customer service	380
Research and development	280
General and administrative	100
Manufacturing	160
	1,250

- Major competitors of Applicon include IBM, Intergraph, Calma (General Electric), McDonnell Douglas, and Computervision.

KEY PRODUCTS AND SERVICES

- INPUT estimates that approximately 66% of Applicon's 1985 revenue was derived from turnkey systems, 16% from processing services, and 8% from software products. The remaining 10% was derived from other products and services, primarily hardware sales and maintenance services.

 - As a result of the company's new business structure, future revenue will primarily be derived from turnkey system sales.

- Applicon offers turnkey systems for computer-aided engineering (CAE), computer-aided design (CAD), computer-aided manufacturing (CAM), and

©1986 by INPUT. Reproduction Prohibited.

computer-integrated manufacturing (CIM). In May 1986 Applicon introduced Bravo 3, its new generation of turnkey systems.

- Bravo3 turnkey systems are based on DEC VAX 11/700 series, VAX 8000 series, and MicroVAX II series computers using the VMS and MicroVMS operating systems.

- Software products available for Bravo3 turnkey systems include the following:

 . Software available for all Bravo3 systems include:

 - IGES Translation, a data translation utility that allows Bravo3 systems to interface with other CAD/CAM systems.

 - Applicon Programming Package, a graphics and applications generator.

 - Bill of Materials report generator.

 - Data Manager, a library and data management system.

 - Technical Documentation, a graphics/text publication system.

 . VLSI applications include:

 - CADPORT Formatter for Sentry Testers, an interface to Logic Analysis program.

 - APPLE Conversion Utility, a data transfer utility between VLSI Design Editor and Applicon systems.

 - CADAT Integrated Simulator, a fault simulator for digital circuits.

 - VLSI Design Editor, an integrated circuit design editing system.

 - Optical Pattern Generator Formatter processes VLSI Design Editor data bases to magnetic tape.

 - Electron Beam Pattern Generator Formatter, a pattern data generating tool.

 - Universal Design Rules Checker, a topological analysis tool.

©1986 by INPUT. Reproduction Prohibited.

- Electrical Parameter Checker, includes Layout Parameter Extractor and Parameter Consistency Checker.

- Logic vs. Layout Consistency Checker, a physical layout and circuit description checker.

- Design/Electrical Rule Checker (DRC/ERC), a user established rules checker for VLSI Design Editor data bases.

- Electrical Rules Checker verifies circuit performance to user established rules.

. Electronic applications include:

- Design Capture, an electronic design generation tool.

- Ladder Diagramming, an electromechanical ladder-type schematic design tool.

- Logic Analysis, an integrated logic, timing, and fault simulator for use with Design Capture.

- Interactive Layout Editor (ILE), a printed wiring board design system.

- Automatic Layout, a tool for schematic analysis, assignment and placement, signal routing, and design verification.

- NC Drill, a printed wiring board drill data generator for use with ILE.

- Photoplotter, an artwork producer for ILE designs.

. Mechanical applications include:

- Solids Modeler, a three-dimensional graphics solids modeler design system.

- Piping and Instrumentation Diagramming, a piping schematic and report generator tool.

- COMPACT II, a computer-assisted part programming language for NC and CNC (computer numerical control) machine tools.

- Surface Modeler (Editor), an analytic and free form surfaces design tool.

©1986 by INPUT. Reproduction Prohibited.

- Design and Documentation, an interactive graphics system for documentation.
- Finite Element Modeler, a tool for constructing, editing, checking, and displaying finite element models.
- Finite Element Analysis analyzes models created with Finite Element Modeler.
- NC Machining, an interactive graphics system for programming NC machine tools.
- Flamecut Nesting, an option to NC Machining capabilities for automatic parts nesting.
- 3D Modeler (Editor), a 3D design modeling, drafting, and drawing management system.
- Facility Layout, a manufacturing plant facilities design and layout system.
- Fixture Layout, an interactive graphics tool for designing fixture layouts.
- Mechanisms-3D, a 2D and 3D rigid mechanical assembly design system.
- Machine Tool Drivers interfaces between NC graphics system and machine tool.
- Sheet Metal Design and Fabrication, an interactive graphics application for designing and machining sheet metal parts.

- Bravo3 products support generally accepted industry protocols including Ethernet, MAP, TOP, and IGES.
 - Applicon is also involved in organizations developing future standards such as PDES and STEP and will support them as they become standards.
- Bravo3 systems are priced from $40,000 to $200,000 depending on the software and hardware configurations.
- Applicon has more than 6,000 customers and over 9,000 workstations representing approximately 4,000 turnkey systems installed worldwide.

©1986 by INPUT. Reproduction Prohibited.

- Additional turnkey systems include the following:
 - Factory Network provides communication that is protected from electrical interference between the engineering office and the factory floor.
 - Factory Network can be based on a Texas Instruments Professional Computer or a DEC VAX or MicroVAX system.
 - Mechanical CAD/CAM-PC is available with a graphics-based NC Programming application or with Applicon's COMPACT II language-based system.
 - Mechanical CAD/CAM-PC systems are based on Texas Instruments Professional Computers.
- Applicon also markets UNIX-based workstations based on technology from Sun Microsystems, Inc. as follows:
 - Graphics Workstation 4725 (GW4725) can be configured as a diskless workstation or, with the optional mass storage subsystem, as a stand-alone workstation.
 - Graphics Workstation 4735 (GW4735) is similar to GW4725 except that GW4735 has high resolution color graphics compared to GW4725's monochrome graphics.

INDUSTRY MARKETS

- Revenue for 1985 was derived from the following industry segments:

Electronics	30%
Mechanical	65
Other	5
	100%

- The electronics segment consists of semiconductor manufacturers as well as computer, telecommunications, instrumentation, automotive, and aerospace firms that are developing electronic circuits for their products.
- The mechanical engineering and manufacturing segment includes automotive, aerospace, machine tool, farm and construction equipment, measurement and analytic instrument, and industrial machinery manufacturers.
- The architecture, engineering, and construction segment includes the petroleum and chemical industries, retailers, architects, and general engineering firms.

©1986 by INPUT. Reproduction Prohibited.

GEOGRAPHIC MARKETS

- Approximately 65% of 1985 revenue was derived from the U.S., 32% from Europe, and the remaining 3% from other international sources, primarily the Far East.
- U.S. regional sales offices are located in King of Prussia (PA), Ann Arbor (MI), Dallas (TX), and Costa Mesa (CA).
 - Additional sales offices are located in Boston, Houston, Iselin (NJ), Rochester (NY), Chicago (IL), Cincinnati (OH), Cleveland (OH), Dayton (OH), Troy (MI), Atlanta (GA), Orlando (FL), Los Angeles (CA), Phoenix (AZ), Santa Clara (CA), and Seattle (WA).
- Canadian sales offices are located in Montreal and Toronto.
- The company's European headquarters is in Frankfurt, with regional sales offices in Paris (France) and Stockport (U.K.).
 - European field offices are located in Hamburg and Munich (West Germany), Hitchin (U.K.), Milan (Italy), Stockholm (Sweden), and Zurich (Switzerland).
 - Applicon also maintains sales and support organizations in Japan and Australia.

COMPUTER HARDWARE AND SOFTWARE

- Applicon maintains equipment from various manufacturers including IBM, DEC, and Data General.

©1986 by INPUT. Reproduction Prohibited.

APPLICON
32 Second Avenue
Burlington, MA 01803
(617) 272-7070

Donald W. Feddersen, President
Division of Computer Aided Systems Group of Schlumberger Technology Corporation, a wholly owned subsidiary of Schlumberger Ltd.
Total Employees: 1,165
Total Revenue: Fiscal Year End 12/31/81: $84,000,000

THE COMPANY

- Applicon develops, manufactures, and markets interactive graphics turnkey systems used for computer-aided design/computer-aided manufacturing (CAD/CAM). The company was incorporated in 1969 by four former employees of the Lincoln Labs at MIT. In 1970, Applicon introduced a turnkey system featuring graphics applications for electronics manufacturers.

- A registered offering of 1.2 million shares of Applicon common stock held by General Electric (GE) Company's wholly owned subsidiary, Business Development Services, Inc. (BDSI), took place in June 1981. GE agreed with the Federal Trade Commission to dispose of the shares to avoid antitrust problems from its March 1981 acquisition of Calma Company, an Applicon competitor.

 - BDSI was Applicon's largest single stockholder, with approximately 22% of the company's outstanding shares.

 - In conjunction with the offering, Applicon issued 260,656 new common shares from which it derived approximately $8.2 million in proceeds. The proceeds primarily financed capital expenditures and increased working capital.

- On January 12, 1982, Applicon was acquired by Schlumberger Ltd. in a tax free exchange of two shares of Schlumberger common stock for every three shares of Applicon common stock. The Applicon stock was valued at approximately $222 million. The company will account for the transaction, which involved approximately four million shares of Schlumberger stock, on a pooling-of-interests basis.

 - Schlumberger, with headquarters in New York City and Paris, provides oilfield services to the petroleum industry worldwide; manufactures and markets electronic and mechanical distribution products for the utilities industry; and manufactures measurement and control instrumentation. The corporation also supplies semiconductors, electronic

©1982 by INPUT. Reproduction Prohibited.

components, and test equipment to electronic equipment manufacturers. Schlumberger had revenue of almost $6 billion in 1981.

- Applicon is one of two divisions forming Schlumberger's Computer Aided Systems Group. The other division, Manufacturing Data Systems Incorporated (MDSI) of Ann Arbor, Michigan, offers CAD/CAM systems for the manufacturing and mechanical engineering industries. MDSI, which specializes in numerical control applications, was acquired by Schlumberger in January 1981.

- Applicon's revenue for calendar 1981 was $84 million, a 25% increase over estimated calendar 1980 revenue of $67 million. Net income for calendar 1981 was $4 million, a slight decline from estimated calendar 1980 net income of $4.5 million.

 - Factors affecting Applicon's profitability include increased price competition from other CAD/CAM vendors; the strengthening of the U.S. dollar, making products more expensive in the foreign marketplace and generating unrealized foreign exchange losses; and continued spending for product development and marketing during periods of lower revenue growth.

- Restated financials for prior years based on Applicon's new fiscal year end are not available because of the acquisition. The company's revenue for its previous FYE April 1981 was $75 million, a 48% increase over 1980 revenue of $50.8 million. Applicon's five-year financial summary prior to acquisition follows:

©1982 by INPUT. Reproduction Prohibited.

APPLICON
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM / FISCAL YEAR	4/81	4/80	4/79	4/78	4/77
Revenue	$75,047	$50,776	$28,469	$18,372	$16,640
. Percent increase from previous year	48%	78%	55%	10%	63%
Income (loss) before taxes	$10,190	$ 5,941	$ 1,357	$(1,258)	$ 1,689
. Percent increase (decrease) from previous year	72%	338%	208%	(174%)	8,789%
Net income (loss)	$ 5,490	$ 3,149	$ 671	$ (717)	$ 789
. Percent increase (decrease) from previous year	74%	369%	194%	(191%)	2,445%
Earnings (loss) per common share (fully diluted)	$ 0.96	$ 0.68	$ 0.19	$ (0.39)	$ 0.32
. Percent increase (decrease) from previous year	41%	258%	49%	(222%)	1,500%

- Applicon spent approximately $8.3 million and $5.7 million, or about 11% of total revenue, on research and development in FYE April 1981 and 1980, respectively.

- Major competitors include Computervision, Auto-trol Technology, Calma, and Intergraph.

- Employees are segmented as follows:

Marketing/sales	225
Customer support	195
Research and development	195
General and administrative	550
	1,165

KEY PRODUCTS AND SERVICES

- Applicon's revenue is derived from CAD/CAM turnkey systems and related services. In calendar 1981, an estimated 87% of revenue was derived from systems sales, and 13% from equipment services.

©1982 by INPUT. Reproduction Prohibited.

- More than 1,200 Applicon systems are installed worldwide, supporting over 3,000 interactive design workstations.

- In June 1982, Applicon introduced a new generation of CAD/CAM products, the Series 4000, which replaces the Applicon Graphics System. Series 4000 turnkey installations feature new graphics processors, workstations, and software. The modular 16- and 32-bit systems are designed to be easily and economically upgraded.

 - Applicon systems feature dual-processing architecture. A DEC PDP-11 or VAX processor is connected with a 32-bit minicomputer manufactured by Applicon, the Graphics 32. Routine functions and data base management are assigned to the DEC processor and interaction with the terminals to the Graphics 32. The Series 4000 may be configured with one of three graphics processing facilities:

 . The 4225 Satellite Graphics Processor (SGP) is a low-cost satellite system, linked to other Series 4000 systems in a distributed network. The 4225, which can also operate as a standalone system, is based on the DEC PDP-11/34 16-bit minicomputer and Applicon's Graphics 32 graphics processor. Up to four color or black-and-white workstations and four disk drives can be supported. Complete configurations, including the 4225, software, and a workstation, begin at $99,500, with a typical installation costing about $150,000.

 . The 4245 Graphics Processing Facility (GPF) is identical to the 4225, but may be configured with up to four dual density tape drives. Complete systems featuring the 4245 are priced from $161,500, with a typical system selling for $250,000.

 . The 4275 GPF includes the VAX-11/751 32-bit processor, with eight times the processing power of the 4225 and 4245. It can support up to 12 workstations, and features data base management capabilities. The 4275 system is priced from $160,000, with a typical configuration selling for $360,000.

 - Series 4000 systems feature two new workstations. The 4640 has a 19-inch black-and-white display and is priced at $40,000. The 4650 features a 19-inch eight-color display and is priced at $70,000.

 . Both workstations offer high-resolution raster graphics and provide inking, tracking, scaling, and rotation capabilities.

 . Perception-Enhanced Resolution Logic (PERL), recently introduced by Applicon, is available as an option on the workstations. PERL minimizes the stair-stepping effect associated with curvilinear and off-axis graphics on raster displays.

©1982 by INPUT. Reproduction Prohibited.

. Workstation capabilities include the support of 256 color-shaded graphics for Applicon's Solids Modeling package.

- Applicon's Tablet Symbol Recognition feature allows the operator to give commands to the system by drawing symbols on a tablet with an electronic pen. A single symbol can replace several lines of typed commands, virtually eliminating the need to enter command information on a keyboard.

- Peripherals available include electrostatic, drum, and flatbed plotters; photoplotters; alphanumeric terminals; printers; and a paper tape reader and punch for numerical control output.

- Series 4000 systems software is built around the DEC RSX-11M operating system for the 4225 and 4245, or DEC's VMS for the 4275. Applicon's Graphics Applications System supports concurrent two- and three-dimensional graphics generation, editing, and output.

- Approximately 200 applications packages are available to perform product development and manufacturing tasks. Software for the electronics industry addresses the design and manufacture of integrated circuits, printed circuit boards, and hybrid circuits. Other applications areas include mechanical engineering and manufacturing, and architectural, engineering, and construction. Some of the applications addressed by Applicon software are listed in the exhibit.

- A new networking capability, Distributed Graphics Network (DGN), provides local and remote communications between Applicon systems. Industry-standard communications protocols, such as DECnet and IBM's 2780/3780 and HASP, allow Series 4000 systems to access and transfer data to other Applicon systems, DEC computers, or mainframes. Series 4000 systems are compatible with the National Bureau of Standards' Initial Graphics Exchange Standard, allowing interchange with other brands of graphics systems.

- In June 1981 Applicon introduced its Solids Modeling package, designed for use on DEC VAX-11/750 and -11/780 equipment. The package improves design visualization, allowing wireframe models to be transformed into color, three-dimensional solid models. Users may cross-section the model to show inner components or surfaces. Sectioning can be planar, stepped, rotated, or partial.

 - Applications for mechanical design include complex products, tools and fixtures, molds, and packaging. Architectural design applications include structures, facilities layout, piping, lighting, technical, and illustration.

 - Solids Modeling is priced at $50,000.

- The Video Designer System, introduced in January 1982, is available for either mechanical/architectural or printed circuit board applications. The basic system, which includes a DEC PDP-11/34 minicomputer, Applicon Graphics 32

©1982 by INPUT. Reproduction Prohibited.

EXHIBIT

APPLICON CAD/CAM APPLICATIONS

APPLICATION AREA/PRODUCT NAME
• Electronics
– Schematic Diagrams
– Netlist Creation
– Printed/Hybrid Circuits
– Very Large-Scale Integration (VLSI)
– Microelectronics
– Placement/Routing
– Design Verification
– Artwork Generation
– Assembly Drawings
– Fabrication Drawings
– Packaging Design
– Numerical Control ("NC") Outputs
– Bill of Material Generation
– Data Base Output
– Symbolic Layout
• Mechanical Engineering and Manufacturing
– Product Design
– Detail Drafting
– Technical Illustration
– Electrical Diagrams
– Hydraulic & Pneumatic Schematics
– Clearance Checks
– Engineering Analysis
– Mass Properties Analysis
– Sheet Metal Development
– Finite Element Analysis Modeling
– Fixture Design
– Parts Nesting Optimization
– NC Flame Cutting
– NC Tape Generation
– NC Tool Path Verification
– Flat Pattern Development
– Turning/Punching
– Process Planning

APPLICATION AREA/PRODUCT NAME
• Architectural/Engineering/Construction
– Wiring Diagrams
– Elementary Diagrams
– Electrical Physical Drawings
– Piping and Instrumentation Diagrams
– Piping Drawings
– Process Flow Diagrams
– General Arrangement Drawings
– Civil Engineering Drawings
– Structural Drawings
– Architectural Drawings
– Bill of Material Generation
– Interconnect Take-Offs
– Site Planning
– Facilities Layout
– Structural Layout/Detailing
– Planes/Sections/Elevations

©1982 by INPUT. Reproduction Prohibited.

processor, one disk and one dual density tape subsystem, a black-and-white workstation, and an alphanumeric terminal, is priced at $150,000.

- Video Designer supports either two- or three-dimensional applications software and is upgradable to a multi-terminal system with a choice of plotters and peripherals.

- Additional black-and-white workstations are priced at $40,000 each. Color terminals may be purchased for an additional $15,000.

- Applicon also manufactures an ink-jet Color Plotter used in conjunction with its Solids Modeling package. The company derives a small percentage of hardware revenue from the product, marketed through independent sales representatives and distributors.

- Three systems software packages for use with the 4275 GPF will be released in late 1982.

 - Applicon Graphics Language (AGL) is designed to speed the development of graphics programs. Graphics functions and data types are built into the language, enabling users to develop their own applications programs.

 - The Series 4000 data base management system provides tools to establish and manage an engineering data base and link the multidisciplinary activities that are part of the product development cycle. Data can be extracted for project management, inventory management, cost analysis, and manufacturing process planning.

 - An extended graphics editor for two- and three-dimensional graphics creation, editing, and manipulation works in conjunction with the data base management system. Features include display prompting messages and the capability to display eight views simultaneously.

- Over 175 employees staff the company's customer training and support programs.

 - Classes are regularly scheduled at training facilities in Woburn (MA) and Santa Clara and Culver City (CA), or may be held at the customer's site.

 - ACCESS is Applicon's software support and hardware maintenance program. It includes a toll-free hotline, priced at $3,600 per year for the first system installed at a site, and $1,080 for each additional system.

- Applicon develops most of the software it offers and manufactures its workstations. Most peripherals are built by outside suppliers.

©1982 by INPUT. Reproduction Prohibited.

INDUSTRY MARKETS

- Revenue for calendar 1981 is derived from three broad industry segments:

Electronics	50%
Mechanical engineering and manufacturing	40%
Architectural, engineering, and construction	10%

- The electronics segment consists of semiconductor manufacturers as well as computer, telecommunications, instrumentation, automotive, and aerospace firms that are developing electronic circuits for their products.

- The mechanical engineering and manufacturing segment includes automotive, aerospace, machine tool, farm and construction equipment, measurement and analytic instrument, and industrial machinery manufacturers.

- The architecture, engineering, and construction segment includes the petroleum and chemical industries, retailers, architects, and general engineering firms.

GEOGRAPHIC MARKETS

- Thirty percent of Applicon's FYE April 1981 revenue was foreign. Of this, 16% was derived from Europe and 14% from other international sources, primarily the Far East.

- U.S. regional sales offices are located in Waltham (MA), Schaumburg (IL), Dallas, Culver City (CA), and Fort Washington (PA).

 - Additional sales offices are located in Albuquerque, Atlanta, Austin, Milford (OH), Cleveland, Glastonbury (CT), Lakewood (CO), Troy (MI), Greenville (SC), Houston, Indianapolis, Edina (MN), Metairie (LA), Altamonte Springs (FL), Tempe (AZ), Pittsburgh, Beaverton (OR), Rochester (NY), Salt Lake City, San Diego, Santa Clara (CA), Tukwila (WA), Tulsa, and Rockville (MD).

- The company's European headquarters is in Amsterdam, with regional sales offices in Munich, Paris, and Stockport (U.K.).

 - Direct sales personnel are in Belgium, Denmark, Italy, Switzerland, Austria, The Netherlands, and Spain.

 - Distributors are in Australia, Japan, Taiwan, South America, Mexico, South Africa, and Israel.

COMPUTER HARDWARE AND SOFTWARE

- An IBM 4331 is installed for accounting functions. Several DEC PDP-11 and VAX computers are used for product development.

©1982 by INPUT. Reproduction Prohibited.

Stewart Newman
Mgr Advert & Promo.

COMPANY HIGHLIGHT

APPLICON, INC.
32 Second Avenue
Burlington, MA 01803
(617) 272-7070

Donald Feddersen, President
Private Corporation
Total Employees: 797
Total Revenues, Fiscal Year End 4/30/80: $50,776,000

THE COMPANY

- Applicon, Inc. develops, manufactures and markets interactive graphics systems used for computer-aided design/computer-aided manufacturing (CAD/CAM) systems. It was incorporated in 1969 in Massachusetts by four former employees of the Lincoln Labs at MIT who intended to specialize in graphics software. In 1970, Applicon introduced a turnkey system with graphics applications for electronics manufacturers.

- Fiscal year 1980 revenues climbed 78% to $50.8 million from 1979 revenues of $28.4 million. Applicon management expects FY 1981 revenues to reach between $70 and $80 million, a 40-60% increase. Financial data for Applicon, Inc. follows:

APPLICON
FIVE-YEAR FINANCIAL SUMMARY
(FYE 4/30, $ Thousand)

ITEM / FISCAL YEAR	1980	1979	1978	1977	1976
Revenues	$50,776	$28,469	$ 18,372	$16,640	$10,183
. Percent increase from previous year	78%	55%	10%	63%	7%
Income (loss) before taxes	$ 5,941	$ 1,357	($1,258)	$ 1,689	($ 34)
Net income (loss)	$ 3,149	$ 671	($ 717)	($789)	$ 31

 - Applicon management attributes its increase in revenues in 1980 to the introduction of new products and the continuing demand for CAD/CAM products throughout the industry.

- Approximately half of its revenues have traditionally been derived from the electronics industry, namely manufacturers of integrated circuits (ICs) and printed circuit boards (PCBs). Management acknowledges that the mechanical engineering and manufacturing, as well as the architectural engineering

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

industries now have a broader market potential than the electronics industry. Therefore, Applicon intends to increase its penetration of those market segments.

- Competition for its turnkey CAD/CAM systems stems from Computervision, Auto-trol Technology, CALMA and Gerber Scientific.

- As of April 30, 1980, there were 797 employees at Applicon, which is a 39% increase over the 572 employees in 1979. The employees are divided by function as follows:

-	Marketing sales	192
-	Software services/customer support	150
-	Research and development	147
-	General and administrative	308
		797

KEY PRODUCTS AND SERVICES

- Most of Applicon's revenues are derived from the manufacture and sale of turnkey systems with CAD/CAM applications.

- The Applicon Graphics System consists of the Central Processing Facility (CPF) which features a dual-processing architecture: a Digital Equipment Corporation (DEC) PDP-11 connected with a special-purpose, 32-bit minicomputer manufactured by Applicon, the Graphics 32.

 - The union of these processors maximizes overall system throughput by assigning routine functions and data base management to the PDP-11/34 and interaction with the terminals to the dedicated Graphics 32.

 - The graphics workstation terminals include an alphanumeric keyboard tablet and electronic pen.

 - Peripheral options include teleprinter terminals, an alphanumeric video terminal, a paper tape reader and punch, a punched cardreader, line printer, and additional magnetic tape and disk drives.

- Applicon management believes that a key to its systems' performance, productivity and value to customers is the software, both operating system software and applications software. Much of the flexibility of its CAD/CAM systems results from numerous applications software packages tailored to perform a range of product development and manufacturing tasks.

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

- The Applicon systems use DEC's RSX-11M operating system, which enables Applicon to dedicate its development resources to graphics-oriented applications while also allowing users to employ many engineering analysis, manufacturing and project control programs written by others to operate under RSX-11M.

- Each Applicon system incorporates specialized system software to adapt RSX-11M to Applicon's applications software packages. Different system software is available for Applicon's two-dimensional and three-dimensional applications packages and for the Super Very Large Scale Integration (VLSI) package.

- In addition, the company offers the Interactive Multi-Activity Graphics Environment (IMAGE) system software which allows the customer to run two-dimensional and three-dimensional applications simultaneously on separate terminals connected to the same central processing unit, while developing specialized computer programs on other terminals in several standard, high-level programming languages.

- Applicon offers applications packages which are both task-oriented and industry-oriented. Task-oriented applications packages can be used for problem solving in a number of industries, while industry-oriented applications packages address unique problems in a specific segment of the CAD/CAM market.

- The data generated by an Applicon system may be augmented, revised and extracted for company use elsewhere; e.g., driving numerically controlled (NC) machinery, generating a bill of materials or performing stress analysis.

- There have been 600 Applicon Graphics Systems installed, including 2,000 terminals. The average cost of a system with four workstations is approximately $300,000.

- Applicon offers specialized systems for use in the electronics industry.

 - The Video PCB System provides the interactive graphic tools required by the printed circuit designer and manufacturer. The average system costs $300,000.

 - The Super VLSI Graphics System was designed to handle very large-scale integration circuit geometry problems. The system addresses the need for higher resolution, performance and flexibility that integrated circuit designers require for increasingly complex integrated chip designs.

INDUSTRY MARKETS

- Applicon's revenues are derived from three broad industry segments:

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

-	Electronics	50%
-	Mechanical engineering and manufacturing	40
-	Architectural engineering (including civil engineering)	10
		100%

GEOGRAPHIC MARKETS

- Export sales represented approximately 20% of Applicon's 1980 revenues.
- In addition to a direct sales force spread across the entire U.S., Applicon has sales offices in Belgium, Germany, France, United Kingdom, Italy and Denmark.
 - Applicon has distributors in Japan, Taiwan, South America, Mexico and a number of other countries.

COMPUTER HARDWARE AND SOFTWARE Applicon has an IBM System 34 installed for accounting functions and several DEC PDP-11s for development purposes.

© 1980 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

APPLIED BUSINESS TECHNOLOGIES, INC.
4631 West Chester Pike
Newtown Square, PA 19073
Phone: (215) 359-0700
Fax: (215) 359-1351

President:	David K. Moldoff
Status:	Private Company
Total Employees:	28
Total Revenue:	$2,500,000*
Fiscal Year End:	12/31/92

*INPUT estimate

Key Points

- Applied Business Technologies (ABT) provides its ABT CAMPUS® integrated software primarily to colleges and universities.
- The company has migrated its products to an open systems environment.
- During 1993, ABT released ABT CAMPUS 4.4, a SQL-compliant product for IBM compatible personal computers.
- ABT is also using Windows as a graphical user interface to ABT CAMPUS.
- Added on-line documentation is offered via a hypertext link.

Copyright 1992 by INPUT. Reproduction Prohibited.

Company Description

Applied Business Technologies, Inc. (ABT), founded in 1976, develops, markets, and supports integrated software products for administrative, financial, and auxiliary applications to colleges, universities, and other not-for-profit organizations. The company also provides a range of professional services to its software customers.

Strategy

ABT's strategy is to move to client/server and use Windows as a graphical user interface.

Key Products and Services

INPUT estimates approximately 60% of ABT's 1992 revenue was derived from applications software products, 20% from associated support services, and 20% from professional services.

ABT CAMPUS® is an integrated on-line system designed to meet the information needs of colleges, universities, secondary schools, and other not-for-profit organizations.

- ABT CAMPUS runs on IBM PCs and compatibles and DEC VAX and MicroVAX computers. The software currently supports DEC VMS, XENIX, UNIX, MS-DOS, PC-DOS, and Novell Network operating systems.
- ABT CAMPUS' integrated modules include the following:
 - RECRUIT-DRIVE™ is a records management system for student recruiting and applicant processing by preparatory school, college, university, and graduate school admissions offices.
 - RECORDS-DRIVE™ is a records management system for school registration and grade processing for academic and registrar offices.
 - FINANCE-DRIVE™ is a financial management system for student billing, disbursements, fund accounting, and cash receipts.
 - FUND-DRIVE™ is a fund-raising management system.
- ABT CAMPUS modules are written in BASIC. The source code is available.
- ABT has installed over 200 packages at 60 customer sites.

Copyright 1992 by INPUT. Reproduction Prohibited.

Professional services provided by ABT include the following:

- Data conversion services.
- Analysis and programming to customize software to specific client requirements.
- Consulting.
- Education and training.

Industry Markets

Colleges and universities account for approximately 85% of ABT's revenue. The remainder of revenue is derived from other not-for-profit organizations, including hospitals, museums, orchestras, and zoos.

Clients

Georgian Court College (Lakewood, NJ) is an ABT client.

Geographic Markets

One hundred percent of ABT's revenue is derived from the U.S.

Copyright 1992 by INPUT. Reproduction Prohibited.

APPLIED BUSINESS TECHNOLOGIES, INC.
4631 West Chester Pike
Newtown Square, PA 19073
(215) 359-0700

David K. Moldoff, President
Private Company
Total Employees: 16
Total Revenue, Fiscal Year End
12/31/90: $1,500,000 *

*INPUT estimate

The Company

Applied Business Technologies, Inc. (ABT), founded in 1976, develops, markets, and supports integrated software products for administrative, financial, and auxiliary applications to colleges, universities, and other not-for-profit organizations. The company also provides a range of professional services to its software customers.

Key Products and Services

INPUT estimates approximately 60% of ABT's 1990 revenue was derived from application software products, 20% from associated support services, and 20% from professional services.

ABT CAMPUS™ is an integrated on-line system designed to meet the information needs of colleges, universities, secondary schools, and other not-for-profit organizations.

- CAMPUS runs on IBM PCs and compatibles, DEC VAX and MicroVAX computers, and Wang 2200 systems. The software currently supports DEC VMS, XENIX, UNIX, MS-DOS, PC-DOS, and Novell Network operating systems.
- CAMPUS' integrated modules include the following:
 - RECRUIT-DRIVE™ is a records management system for student recruiting and applicant processing by preparatory school, college, university, and graduate school admissions offices.
 - RECORDS-DRIVE™ is a records management system for school registration and grade processing for academic and registrar offices.
 - FINANCE-DRIVE™ is a financial management system for student billing, disbursements, fund accounting, and cash receipts.

Copyright 1991 by INPUT. Reproduction Prohibited.

- FUND-DRIVE™ is a fund-raising management system.

- ABT CAMPUS modules are written in BASIC. The source code is available.

- ABT has installed over 200 packages at 60 customer sites.

Professional services provided by ABT include the following:

- Data conversion services.
- Analysis and programming to customize software to specific client requirements.
- Consulting.
- Education and training.

Industry Markets

Colleges and universities account for approximately 85% of ABT's revenue. The remainder of revenue is derived from other not-for-profit organizations, including hospitals, museums, orchestras, and zoos.

Geographic Markets

One hundred percent of ABT's revenue is derived from the U.S.

Copyright 1991 by INPUT. Reproduction Prohibited.

APPLIED BUSINESS TECHNOLOGIES, INC.
4631 West Chester Pike
Newtown Square, PA 19073
(215) 359-0700

David K. Moldoff, President
Private Company
Total Employees: 12
Total Revenue, Fiscal Year End
12/31/88: $1,000,000 *

*INPUT estimate

The Company

Applied Business Technologies, Inc. (ABT), founded in 1976, develops, markets, and supports integrated software products for administrative, financial, and auxiliary applications to colleges, universities, and other not-for-profit organizations. The company also provides a range of professional services to its software customers.

Key Products and Services

INPUT estimates approximately 60% of ABT's 1988 revenue was derived from application software products, 20% from associated support services, and 20% from professional services.

ABT CAMPUS™ is an integrated on-line system designed to meet the information needs of small colleges, universities, secondary schools, and other not-for-profit organizations.

- CAMPUS runs on IBM PCs and compatibles, DEC VAX and MicroVAX computers, and Wang 2200 systems. The software currently supports DEC VMS, XENIX, UNIX, MS-DOS, PC-DOS, and Novell Network operating systems.
- CAMPUS' integrated modules include the following:
 - RECRUIT-DRIVE™ is a records management system for student recruiting and applicant processing by preparatory school, college, university, and graduate school admissions offices.
 - RECORDS-DRIVE™ is a records management system for school registration and grade processing for academic and registrar offices.
 - FINANCE-DRIVE™ is a financial management system for student billing, disbursements, fund accounting, and cash receipts.

Copyright 1989 by INPUT. Reproduction Prohibited.

- FUND-DRIVE™ is a fund raising management system.

- ABT CAMPUS modules are written in BASIC. The source code is available.

- ABT has installed over 200 packages at 50 customer sites.

Professional services provided by ABT include the following:

- Data conversion services.
- Analysis and programming to customize software to specific client requirements.
- Consulting.
- Education and training.

Industry Markets

Colleges and universities account for approximately 25% of ABT's revenue. The remainder of revenue is derived from other not-for-profit organizations, including hospitals, museums, orchestras, and zoos.

Geographic Markets

One hundred percent of ABT's revenue is derived from the U.S.

Copyright 1989 by INPUT. Reproduction Prohibited.

COMPANY BRIEF

Primary Industry-Specific Market: Other (Non-Profit Organizations)

Applied Business Technologies, Inc.
500A South Roberts Road
Bryn Mawr, PA 19010
(215) 527-8900

CEO: David K. Moldoff, President
Private Company
Founded: 1976

Employees: (11/86): 25
Revenue (FYE 12/31/85): $1.5 million

The Company: Develops, markets, and supports integrated application software and turnkey systems for colleges, universities, and other not-for-profit organizations

Sources of Revenue:
- Application Software (20%)
- Professional Services (20%)
- Turnkey Systems (40%)
- Software Support (20%)

Key Products and Services:
- Application Software and Turnkey Systems (Utilizes IBM PC and Wang 2200 hardware)
 - Administration of colleges and universities
 - Fund raising for not-for-profit organizations
- Professional Services
 - Software customization

Target Industries:
- Colleges and universities (25%)
- Other not-for-profit institutions (75%)
- Not-for-profit institutions including hospitals, museums, orchestras, and zoos

Geographic Markets:
- U.S. (100%)
- Sales Office: Bryn Mawr (PA)
- Sells mainly in the Philadelphia area

Other:
- The company has installed 150 packages at 50 customer sites

©1986 by INPUT. Reproduction Prohibited.

APPLIED COMMUNICATIONS, INC.

330 South 108th Avenue
Omaha, NE 68154
Phone: (402) 390-7600
Fax: (402) 330-1528

President & CEO:	William E. Fisher
Status:	Subsidiary
Parent:	Tandem Computers
Total Employees:	550 (9/92)
Total Revenue:	$80,000,000*
Fiscal Year End:	9/30/92

* INPUT estimate

Key Points

- Applied Communications, Inc. (ACI) pioneered the development of software for electronic funds transfer (EFT) systems that allow consumers to make purchases with credit and debit cards or use automated teller machines to access their bank account 24 hours a day.
- In April 1991, U S WEST sold ACI to Tandem Computers. This move leverages ACI's long-term strategic alliance with Tandem as a partner in developing software platforms and connectivity standards for open integration on Tandem systems.

Copyright 1992 by INPUT. Reproduction Prohibited.

Company Description

ACI develops, markets, and supports software products for automated teller machine (ATM) and point-of-sale (POS) networks and manned teller, wire transfer, cash management, and automated clearinghouse (ACH) applications.

The company also provides custom software development, consulting services, and facilities management (systems operations) services.

Company History

ACI was founded in 1975 to develop customized applications software systems for retail banking networks.

In July 1986, ACI was acquired by U S WEST for approximately $120 million. ACI had approximately 285 employees at the time of the acquisition and revenue of $29.3 million for the fiscal year ending September 30, 1985.

In September 1990, ACI sold certain wire transfer and ACH processing software to Stockholder Systems, Inc. The products included WireNet™, MoneyNet Micro™, TRG/TRC™, and CIX-PC™ PC-based systems, and CIX™ for IBM mainframe platforms.

ACI operated as a wholly owned subsidiary of U S WEST until April 1991, when it was acquired by Tandem.

- US WEST sold ACI to Tandem in a non-monetary exchange. Tandem agreed to deliver computer systems and related consulting services to U S WEST through April 30, 1995.
- The transaction was valued at approximately $56 million.

In October 1991, ACI Telecom, an operating division of ACI, became part of Tandem's wholly owned subsidiary, Tandem Telecommunications Systems. ACI Telecom designs and develops applications software for enhanced services, information services, and intelligent network marketing to the telecommunications industry.

Financials

In the five-year summary that follows, ACI's revenues for fiscal 1992 and 1991 are based on a fiscal year ending September 30, the same as Tandem's. Prior years' results reflect a December 31 fiscal year end, the same as U S WEST's.

Copyright 1992 by INPUT. Reproduction Prohibited.

APPLIED COMMUNICATIONS, INC.
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR				
ITEM	9/92	9/91	12/90	12/89	12/88
Revenue	$80.0*	$78.0*	$76.1	$72.8	$68.1
· Percent increase from previous year	3%*	2%*	5%	7%	22%

* *INPUT estimates*

Alliances/ Joint Ventures

ACI has a joint venture with TXN Solution Integrators of Toronto (Ontario, Canada).

ACI has an alliance with Atalla Corporation to sell manned teller delivery systems using ACI's BASE24-teller software and Atalla's Customer Transaction Terminal.

ACI also has worldwide product distribution rights with the following companies:

- Insession--to market ICE, an IBM connectivity solution for Tandem hardware users
- Sierra Software, Inc.--to market Sierra's NonStop SQL data base management and access products
- Systems Center, Inc.-- to market System Center's Network DataMover-Tandem (NDM-Tandem) software that facilitates the transfer of data between IBM mainframes and Tandem computers
- Gasper Corporation--to market Gasper's Automan family of PC-based products that automate the monitoring of ATM networks
- European Card Services--to market its Tandem-based GEN90 credit card management system

Employees

ACI currently has about 550 employees, of which about one-third work in product research and development and one-third in customer service and support positions.

Copyright 1992 by INPUT. Reproduction Prohibited.

Key Products and Services

INPUT estimates approximately 80% of ACI's revenue is derived from its software products and support services and 20% from professional services (consulting, custom, education).

ACI's software products are used by more than 250 customers in 42 countries.

Retail Banking Systems:

ACI's BASE24 product family is an integrated group of modular software products designed for POS, ATM, and manned teller functions.

- BASE24 products run on the full range of Tandem NonStop computers and offer support for nearly every major ATM and POS terminal. BASE24 software interfaces with more than 90 EFT interchanges.
- BASE24 products include the following:
 - BASE24-atm® is an ATM transaction processing system designed to support all major brands of ATMs. This product drives terminals, performs authorizations, and conducts switching functions.
 - BASE24-pos® is a point-of-sale product that allows financial institutions and retailers to directly debit customer bank accounts or authorize credit transactions.
 - BASE24-teller® is a manned-teller transaction processing system that allows financial institutions to automate their branch teller operations, allowing on-line access to a common data base shared by other EFT services.
 - BASE24-menu+™ is a software connectivity tool that allows a user to access a variety of host and front-end resident applications from a single front-end terminal.
 - BASE24-pcs® is an on-line problem control system designed to monitor EFT networks.
 - BASE24-span® is a transaction routing product that allows the user to link several copies of a single BASE24 product or to combine different BASE24 products to accommodate growth.

ACI's Check Authorization and Courtesy Card electronic payment systems can be used alone, in conjunction with one another, or in

Copyright 1992 by INPUT. Reproduction Prohibited.

conjunction with BASE24-pos software for authorizing credit and debit card transactions. The systems operate on Tandem computers.

LINK24R is a CICS-based system that provides the interface between BASE24 and host applications. It is designed for IBM mainframe customers who have installed or are scheduled to install BASE24 as a front-end or back-end processor.

Corporate Banking Systems:

ACI also offers Tandem-based corporate banking software, including wire transfer, cash management, and ACH systems.

- CO-ach™ (Cooperative ACH Processing) automates clearing, settlement, and distribution of electronic debit and credit transactions for large and small institutions.

- Cash Management Plus™ is an information reporting and transaction initiation package that functions as an electronic gateway to allow authorized bank customers real-time access to numerous corporate banking applications.

- MoneyNet™ provides automated funds transfer processing, including money desk processing, multibank processing, international S.W.I.F.T. and TELEX support, risk management control, corporate access services, and ongoing regulatory compliance and systems enhancements.

Professional Services/Facilities Management:

ACI's Project Management and Implementation Program (PMIP) provides customers with a range of support services, including product integration reviews, development of specification documents and project plans, site preparation, testing and go-live support, project management, product consulting throughout the project cycle, and in-depth training.

ASTech is ACI's service support group that provides operations analysis, capacity planning, system performance reviews, and short- or long-term on-site technical assistance.

- The focus of ASTech's on-site assignments is on BASE24 product implementation support; supplemental operational staffing; and assistance with software maintenance, project management, and programming.

Copyright 1992 by INPUT. Reproduction Prohibited.

- ASTech provides and/or coordinates custom education and documentation efforts, several different software maintenance plans, and on-site support for hardware and software upgrades.

ACI Facilities Management supplies network and operations management for Tandem systems, including installation, maintenance, staffing, training, and daily on-site support.

Industry Markets

Approximately 87% of ACI's revenue is derived primary from banking and finance, 8% from retail, and 5% from other industries.

ACI customers include 53 of the 100 largest banks in the U.S., 5 of the 10 largest in the U.K., and the 3 largest banks in Canada and Australia.

ACI customers also include retailers such as JCPenney, Target Stores, ARCO, Texaco, and Caltex Oil.

Geographic Markets

Approximately 50% of ACI's revenue is derived from the U.S. and 50% from international sources. Customers are located in 42 countries worldwide.

ACI maintains U.S. sales offices in Chicago (IL), Cincinnati (OH), Denver (CO), Jacksonville (FL), Omaha (NE), and Pittsburgh (PA).

ACI has international subsidiaries in the U.K., Canada, and Singapore. In January 1992, ACI acquired BASE24 Ltd., its joint venture company located in Watford (England), resulting in the addition of 135 employees.

ACI has distributors in Argentina, Canada, Chile, Colombia, France, Greece, India, Indonesia, Japan, Mexico, Peru, the Philippines, Spain, South Korea, Taiwan, Turkey, Guatemala, Uruguay, and Venezuela.

Computer Hardware

ACI has Tandem systems installed at its data center for product development and customer support.

Copyright 1992 by INPUT. Reproduction Prohibited.

APPLIED COMMUNICATIONS, INC.
330 South 108th Avenue
Omaha, NE 68154
(402) 390-7600

Raymond Croghan, President
Wholly Owned Subsidiary of U S WEST
Total Employees: 605
Total Revenue, Fiscal Year End
12/31/88: $68,126,000

The Company

Applied Communications, Inc. (ACI) develops, markets, and supports the BASE24[R] family of application software products for electronic funds transfer (EFT). The company also provides networking software, custom software development and consulting professional services, systems integration services, and associated hardware.

- ACI was founded in 1975 to develop customized application software systems for retail networks.
- In July 1986, ACI was acquired by U S WEST for approximately $120 million. ACI had approximately 285 employees at the time of the acquisition and revenue of $29.3 million for the fiscal year ending September 30, 1985.
- ACI now operates as a wholly owned subsidiary of U S WEST within the U S WEST Data Systems Group.

ACI's 1988 revenue reached $68.1 million, a 22% increase over 1987 revenue of $56 million. A three-year revenue summary follows:

APPLIED COMMUNICATIONS, INC.
THREE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR		
ITEM	1988	1987	1986
Revenue	$68.1	$56.0	$29.0
• Percent increase from previous year	22%	93%	N/A

Copyright 1989 by INPUT. Reproduction Prohibited.

In September 1988, ACI acquired a software product that provides terminal passthrough capabilities from Zentech. The products is now marketed by ACI as BASE24-menu™.

ACI is currently organized eight business units as follows:

- ACI has four distribution channel business units that sell, install, and support ACI's products. These units include U.S., Europe, Americas/Pacific, and Alternate (which services the telecommunications industry).

- ACI also has four company product business units that develop and market certain groups of products. These units include Retail Banking, Wholesale Banking, Branch Automation, and New Business Development.

 - The Applied Communications Integration Services (ACIS) group, which reports to the New Business Development business unit, specializes in major system development projects, primarily for electronic payment and service delivery systems for customers in banking and finance, insurance, and state and local government, as well as cross industry.

 - ACI Support and Technical Services (ASTech), which reports to the Retail Banking business unit, is a service support group that provides capacity planning, operations analysis, system performance reviews, and short- or long-term on-site technical assistance.

Recently announced joint ventures/agreements include the following:

- In February 1989, ACI and US WEST Communications agreed to jointly develop a Tandem NonStop-based software package that supports electronic benefits transfer (EBT) applications.

 - The software will be based on ACI's BASE24 product technology and will support ATM and POS disbursements of cash benefits such as those provided by Aid to Families with Dependent Children and other cash programs.

 - It will also provide the capability to electronically process Food Stamp Program benefits through a debit card POS system.

 - In addition to supporting magnetic stripe cards, terminals, and the front-end processing of transactions, the software

Copyright 1989 by INPUT. Reproduction Prohibited.

will produce the various reports that are required to settle with the federal government, retailers, financial institutions, and other agencies involved with distribution of benefits.

- In January 1989, ACI announced the establishment of a joint venture company with SEMA Group plc. The newly formed company, BASE24 Limited, will market and support ACI's BASE 24 software in the U.K., the Netherlands, and Scandinavia. BASE24 Limited employs a staff of over 100 people.

- In December 1988, ACI and Nixdorf Computer AG announced plans to develop micro-based software which will allow for connectivity between Nixdorf's newest line of CSC ATMs and BASE24 software.

- In August 1988, ACI announced its BASE24-atm and BASE24-pos software products would be marketed by IBM as Cooperative Software offerings.

Of ACI's 605 employees, approximately 80 are located in offices outside the U.S.

Key Products and Services

INPUT estimates approximately 85% of ACI's 1988 revenue was derived from its software products and support services. The remaining 15% was derived from professional services and systems integration activities.

ACI's software products are used by more than 250 customers in 28 countries.

ACI's BASE24 product family is an integrated group of modular software products designed for electronic funds transfer systems.

- BASE24 products run on Tandem, Stratus, and IBM System/88 fault-tolerant computers. ACI is a member of the Tandem Alliance program.

- BASE24 products include the following:

 - BASE24-atm^{R} is an automated teller machine (ATM) transaction processing system designed to support all major brands of ATMs.

 - BASE24-pos^{R} is a point-of-sale product that allows financial institutions and retailers to directly debit customer bank accounts or authorize credit transactions.

Copyright 1989 by INPUT. Reproduction Prohibited.

- BASE24-pay® is a pay-by-phone product that provides bank clients access through a standard telephone to banking functions such as bill payment, account inquiries, and funds transfer.

- BASE24-pcs® is an on-line problem control system designed to monitor EFT networks.

- BASE24-teller® is a manned-teller transaction processing system that allows financial institutions to automate their branch teller operations, allowing on-line access to a common data base shared by other EFT services.

- BASE24-videotex® supports electronic delivery of transaction, management, and information services through a home or business terminal.

- BASE24-cash manager® allows financial institutions to offer cash management information as well as funds transfer services to their corporate customers.

- BASE24-menu™ is a software connectivity tool that allows a user to access a variety of host and front-end resident applications from a single front-end terminal.

- BASE24-span® is a transaction routing product that allows the user to link several copies of a single BASE24 product or to combine different BASE24 products to accommodate growth.

Other software products marketed by ACI include the following:

- CreditMaster™, introduced in 1989, is an IBM mainframe-based system for credit card processing.

- WireNet™, acquired with BankPro Systems (San Francisco) in October 1985, is an automated funds transfer product designed to increase the efficiency and security of an institution's wire transfer system. The product includes monitoring and control functions, multi-level security, and remapping of generic data to standard wire service formats. The product operates on a Token Ring Local Area Network of IBM PCs or IBM PS/2s.

Systems integration/professional services contracts awarded to ACI include the following:

Copyright 1989 by INPUT. Reproduction Prohibited.

- In August 1988, ACI signed a Systems Integration Alliance contract with Tandem Computers. ACI's ACIS group will provide systems integration services for Tandem end-users.

- In 1988, ACI's ACIS group was selected as systems integrator by Advanced Card Sciences, Inc. (Atlanta), an electronic payment systems consulting and transaction processing service vendor

 - Advanced Card Sciences plans to introduce a Tandem-based system to perform claims eligibility verification, claims capture, and credit authorization at the point of service in a physician office or hospital.

 - ACIS will provide the necessary Tandem configuration, help to configure and implement the base software, and identify and develop enhancements required for the base system.

- In November 1987, ACI signed a multimillion pound agreement to develop the software and support services for a national point-of-sale network to be implemented throughout the U.K.

 - ACI was selected by EftPos UK Limited, a development company within the Association for Payment Clearing Services jointly owned by the 10 largest financial institutions in the U.K.

 - ACI will have primary responsibility for the software development and central switch installation at EftPos UK.

- In May 1987, ACI was awarded a five-year contract with the Australia and New Zealand Banking Group Limited of Australia (ANZ) to provide turnkey installation of hardware, software, and support services enabling ANZ to implement an extensive nationwide point-of-sale network in Australia.

 - The implementation will be based on ACI's BASE24-atm and BASE24-pos products and will provide additional systems and operational support over the term of the contract.

 - The system will use Tandem NonStop VLX processors procured by ACI under its remarketing agreement with Tandem.

ASTech is ACI's service support group that provides operations analysis, capacity planning, system performance reviews, and short- or long-term on-site technical assistance.

Copyright 1989 by INPUT. Reproduction Prohibited.

- The focus of ASTech's on-site assignments is on BASE24 product implementation support, supplemental operational staffing, and assistance with software maintenance, project management, and programming.
- ASTech provides and/or coordinates custom education and documentation efforts, several different software maintenance plans, and on-site support for hardware and software upgrades.
- Approximately one-third of ACI employees work in customer support.

Industry Markets

ACI's revenue is derived primary from the banking and finance industry.

ACI has installed systems in nearly one-third of the 100 largest U.S. banks, seven of the ten largest banks in the U.K., and four of the five largest banks in Canada.

Geographic Markets

For the first time in the company's history, foreign sales accounted for slightly more than half of ACI's revenue is 1988, up from 45% in 1987, and from less than 29% in 1985.

ACI maintains U.S. sales offices in Los Angeles and San Diego (CA); Milford (CT); Jacksonville (FL); Chicago (IL); Clifton (NJ); Bronxville (NY); Charlotte (NC); Tulsa (OK); Pittsburgh (PA); and Dallas (TX).

ACI maintains international offices in London (England), Melbourne (Australia), Toronto (Canada), and Manama (Bahrain).

BASE24 Limited, the joint venture company of ACI and SEMA Group plc, markets and supports ACI's BASE24 software in the U.K., the Netherlands, and Scandinavia.

ACI has distributors in Argentina, Chile, Columbia, Peru, South Korea, Taiwan, and Venezuela.

Computer Hardware

ACI has Tandem systems installed at its data center for product development and customer support.

Copyright 1989 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATE TO PROFILE DATED FEBRUARY 1985

APPLIED COMMUNICATIONS, INC.
330 South 108th Avenue
Omaha, NE 68154
(402) 390-7600

George F. Haddix, Chairman
Neal C. Hansen, President and CEO
Public Corporation, OTC
Total Employees: 285
Total Revenue, Fiscal Year End 9/30/85: $29,273,950
Computer Services Revenue: $22,624,000

APPLIED COMMUNICATIONS, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	9/85	9/84	9/83	9/82	9/81
Revenue (a)	$ 29,274	$ 24,368	$ 16,429	$ 10,181	$ 9,087
. Percent increase from previous year	20%	48%	61%	12%	N/A
Income before taxes	$ 6,815	$ 3,793	$ 2,078	$ 1,131	$ 948
. Percent increase from previous year	80%	83%	84%	19%	51%
Net income	$ 3,648(b)	$ 2,205	$ 1,465	$ 750	$ 550
. Percent increase from previous year	65%	51%	95%	36%	38%
Earnings per share	$ 0.90	$ 0.55	$ 0.47	$ 0.28	$ 0.22
. Percent increase from previous year	64%	17%	68%	27%	22%

(a) Revenue from terminal enclosures, pedestals, and related products (JBA, Inc.) has been restated for fiscal 1984 to reflect gross rather than net revenue. Revenue from computer hardware sales has been restated for fiscal 1983, 1982, and 1981 to reflect gross rather than net revenue.

(b) Includes $208,000 from the adoption of a new method of accounting for software costs.

- Recent acquisitions/divestitures include the following:

 - In October 1985 Applied Communications, Inc. (ACI) purchased substantially all of the assets of BankPro Systems of San Francisco

©1986 by INPUT. Reproduction Prohibited.

(CA) for approximately $2 million in cash and promissory notes. BankPro Systems developed WireNet™, a microcomputer-based system for medium-size financial institutions that automates wire transfer operations.

- In June 1985 the company sold its U.K. subsidiary, Applied Communications Ltd. (ACL) to CAP Group Ltd. for approximately $2.2 million in cash, CAP common stock, and notes. CAP is now ACI's distributor for the U.K. and Western Europe.

- In February, ACI's German subsidiary, Applied Communications GmbH, was liquidated.

SOURCE OF REVENUE

- Approximately 64% of ACI's fiscal 1985 revenue was derived from software products (57% license fees and 7% software maintenance fees). Professional services accounted for 13%. The remaining 23% of revenue was derived from commissions from Stratus hardware sales, JBA equipment sales, and Tandem system sales. In the three-year summary of source of revenue that follows, prior years results have been restated to reflect the change in the method of accounting for hardware and equipment sales.

THREE-YEAR SOURCE OF REVENUE SUMMARY
($ thousands)

FISCAL YEAR / ITEM	9/85		9/84		9/83	
	Revenue	Percent of Total	Revenue	Percent of Total	Revenue	Percent of Total
Computer Services						
. Software License Fees	$ 16,651	57%	$ 13,595	56%	$ 6,388	39%
. Professional Services	3,723	13	3,917	16	4,985	30
. Software Maintenance Fees	2,250	7	923	4	408	3
Subtotal	$ 22,624	77%	$ 18,435	76%	$ 11,781	72%
Noncomputer Services						
. Hardware Commissions	$ 2,781	10%	$ 3,005	12%	$ 2,334	14%
. JBA	3,227	11	2,928	12	-	-
. Computer Hardware Sales	642	2	-	-	2,315	14
Subtotal	$ 6,650	23%	$ 5,933	24%	$ 4,649	28%
Total	$ 29,274	100%	$ 24,368	100%	$ 16,430	100%

©1986 by INPUT. Reproduction Prohibited.

- For fiscal 1985, software license revenue was derived as follows:

	Percent of Total	Total Number Installed 9/30/85
BASE24-atm®	57%	84
BASE24-pos®	32	26
BASE24-videotex	5	8
BASE24-afs	3	5
BASE24-teller	3	10
	100%	133

- Approximately 79% of ACI's fiscal 1985 revenue was derived from the U.S. and 21% from export sales.

NEW PRODUCTS AND SERVICES

- New products announced during fiscal 1985 included the following:
 - BASE24-pcs® , an on-line problem control system.
 - BASE24-cash manager™, an electronic cash management system.
- ACI software is now compatible with IBM System/88 and Stratus computers. BASE24-atm and BASE24-pos are now available for these machines.

©1986 by INPUT. Reproduction Prohibited.

APPLIED COMMUNICATIONS, INC.
330 South 108th Avenue
Omaha, NE 68154
(402) 390-7600

George F. Haddix, President and CEO
Public Corporation, OTC
Total Employees: 267
Total Revenue, Fiscal Year End 9/30/84: $22,815,192
Computer Services Revenue: $18,447,000

THE COMPANY

- Applied Communications, Inc. (ACI) was founded in 1975 to develop customized applications software systems for retail electronic funds transfer (EFT) networks. While ACI continues to develop customized software, since 1982 ACI's main emphasis has been to develop, market, and maintain on-line transaction processing software packages for retail electronic funds transfer (EFT) systems.

- Fiscal 1984 revenue reached $22.8 million, a 56% increase over fiscal 1983 revenue of $14.6 million. Net income rose 51% from $1.5 million in 1983 to $2.2 million in 1984. A five-year financial summary follows:

APPLIED COMMUNICATIONS, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	9/84	9/83	9/82	9/81	9/80
Revenue	$22,815	$14,599	$8,351	$5,527	$3,797
. Percent increase from previous year	56%	75%	51%	46%	131%
Income before taxes	$ 3,793	$ 2,078	$1,131	$ 948	$ 627
. Percent increase from previous year	83%	84%	19%	51%	312%
Net income	$ 2,205	$ 1,465	$ 750	$ 550	$ 398
. Percent increase from previous year	51%	95%	36%	38%	237%
Earnings per share	$ 0.55	$ 0.47	$ 0.28	$ 0.22	$ 0.18
. Percent increase from previous year	17%	68%	27%	22%	200%

©1985 by INPUT. Reproduction Prohibited.

- ACI management attributes the company's increased revenue to the growing interest in electronic funds transfer in the banking industry.

- Research and development expenditures increased from $1.2 million (8% of revenue) in fiscal 1983 to $2.4 million (11% of revenue) in fiscal 1984.

- In April 1984 ACI purchased certain assets of JBA, Inc. of Omaha (NE) for $1,800,000 cash, 20,000 shares of common stock, and a promissory note with face value of $1,500,000. JBA currently operates as a subsidiary of ACI.

 - JBA manufactures, markets, and installs ATM terminal enclosures and pedestals. JBA accounted for approximately 6% or $1.4 million of ACI's fiscal 1984 revenue.

- Transaction Systems Architects, Inc. of Omaha (NE) is ACI's research and development subsidiary. Transaction Systems Architects produces no revenue and is currently inactive. The subsidiary's employees are included with ACI's professional services staff.

- As of September 30, 1984, ACI had 267 employees, segmented as follows:

U.S. marketing/sales	36
European marketing/sales	50
Customer support	56
Product development/ professional services	99
General and administrative	26
	267

 - ACI currently has approximately 287 employees.

- ACI considers its competitors to be Information Processing Corporation (a unit of MTECH), A.O. Smith, Anacomp/Kranzeley, and Shared Financial Systems.

KEY PRODUCTS AND SERVICES

- Approximately 64% of ACI's fiscal 1984 revenue was derived from software products (60% license fees and 4% software maintenance fees). Professional services accounted for 17%. JBA products produced 6%. The remaining 13% was derived from hardware commissions. A three-year summary of source of revenue follows ($ thousands):

©1985 by INPUT. Reproduction Prohibited.

FISCAL YEAR / ITEM	9/84 Revenue	9/84 Percent of Total	9/83 Revenue	9/83 Percent of Total	9/82 Revenue	9/82 Percent of Total
Computer Service						
. Software License Fees	$13,657	60%	$ 8,759	60%	$2,067	25%
. Professional Services	3,879	17	4,964	34	4,852	58
. Software Maintenance Fees	913	4	438	3	224	3
Subtotal	$18,449	81%	$14,161	97%	$7,143	86%
Noncomputer Service						
. Hardware Commissions	$ 2,997	13%	$ 438	3%	$1,208	14%
. JBA	1,369	6	-	-	-	-
Subtotal	$ 4,366	19%	$ 438	3%	$1,208	14%
Total	$22,815	100%	$14,599	100%	$8,351	100%

- o ACI offers a family of on-line transaction processing software packages under the trade name BASE24. Introduced in 1982, BASE24 is designed to provide reliable service on a 24-hour basis to proprietary or shared EFT network environments.
 - BASE24 uses a modular architecture which allows additional functions to be added as specific network requirements change.
 - BASE24 software operates on the fault-tolerant Tandem NonStop II and TXP computers.
 - Under a software house agreement with Tandem Computer Corp., ACI receives a software house commission (based on the net selling price) for Tandem hardware sales where ACI's software was instrumental in inducing the customer to purchase.
 - BASE24 networks require certain base modules as described below:
 - BASE24 Teleprocessing Nucleus controls the flow of transactions in the network and guards against the loss of transactions due to hardware or communication line failure. This is a required module in an EFT network.
 - BASE24 Authorization modules control the form of authorization required for a particular transaction. Authorization

©1985 by INPUT. Reproduction Prohibited.

modules also maintain the on-line customer data base. Each network must contain at least one of the four available authorization products.

- BASE24 Device Control modules control the operation of ATMs and other end-user terminals in the network. Device Control products are available for all major brands of devices available (ATMs, point-of-sale terminals, etc.) and must be licensed for each type of device in the network.

- BASE24 CRT Control modules permit dedicated CRTs to access the system. The CRTs are used to make inquiries, change the status of the system, or make specific changes in the data bases. A CRT Control Product must be licensed for each type of CRT used in the network.

- BASE24 Interchange Products provide the client with the capability to interface with and transmit transactions to and receive from national EFT networks. An interchange product is not required, but one must be licensed for each network with which the institution interfaces.

- BASE24 Host Interface permits transmission of messages and data between the client's computers and the BASE24 network. The host interface product uses the American National Standard X9.2 message protocol.

- ACI introduced the first of its BASE24 software products, BASE24-atm[T.M.], in September 1982. Currently there are 65 BASE24-atm installations. There are over 36 product modules available for Base 24-atm. Each of the product modules is licensed separately, and an institution may select different combinations of modules.

- In January 1984 ACI introduced the following additional BASE24 software systems:

 - BASE24-teller[T.M.] (manned teller system) permits financial institutions to automate branch operations and integrate manned teller systems with their ATM and point-of-sale networks. There are 10 installations of BASE24-teller worldwide.

 - BASE24-pos[T.M.] (point-of-sale) provides retail establishments with the capability to directly debit customer bank accounts or authorize credit transactions for purchase. BASE24-pos is installed in 10 U.S. financial institutions.

 - BASE24-afs[T.M.] (automated fuel system) allows card-operated gasoline pumps to interface directly with EFT networks operated by financial institutions or oil companies. This system permits payments for gasoline purchases to be made by directly

©1985 by INPUT. Reproduction Prohibited.

debiting the customer's bank account or authorizing the extension of credit. Four North American U.S. oil companies have installed ACI's BASE24-afs.

. BASE24-videotex™ allows customers to access and update a data base of user information through special television equipment or personal computers. ACI has six installations of BASE 24-videotex worldwide.

- ACI also offers BASE-24-span™ , a system software product that allows financial institutions to operate multiple BASE24 systems as one network. This includes several copies of one BASE24 product or a mix of any BASE24 products. Introduced in September 1982, there are currently 30 installations of Base 24-span.

- License fees for each BASE24 system vary depending on the products and modules selected by the customer/institution.

 . Average license fees for a BASE24-atm, BASE24-pos, or BASE24-teller system range from $250,000 to $500,000.

 . For BASE24-videotex or BASE24-afs systems, license fees average approximately $500,000 each.

 . The cost of a second system is typically less because it can share some of the software modules with the first system.

 . Installation and training are included in the software license fee. The customer receives 30 student days for each BASE24 system purchased. Additional training may be purchased on a per-student-day basis. Students receive hands-on training at ACI's Omaha classrooms.

- Software maintenance is provided free for 90 days after product installation. ACI provides annual software maintenance contracts that typically cost 12% of the original software license fee.

 . HELP24 is a 24-hour telephone support service provided by ACI through its Omaha office. A software engineer that is familiar with the customer's system is available to answer customer questions.

• Although ACI's primary focus is now on its packaged software, ACI continues to develop customized software on a contract basis. ACI evaluates each development project and undertakes only those projects that will result in software that ACI believes has the potential to be added to its family of standard software products.

- ACI provides professional services to Tandem computer users who want customized software or need customization for purchased software.

©1985 by INPUT. Reproduction Prohibited.

- In addition to its BASE24 customers that require customization, ACI has 10 professional services clients in California.

- Approximately $4.4 million (19%) of ACI's fiscal 1984 revenue was derived from noncomputer services, including Tandem system sales and JBA product sales.

INDUSTRY MARKETS

- Approximately 93% of ACI's fiscal 1984 revenue was derived from the banking and finance industry. The remaining 7% was derived from the oil industry.

- ACI's software products are primarily marketed to the banking and finance industry. The company's target market for its products is the top 400 commercial banks and top 200 savings and loan institutions. ACI also targets the 25 largest retailers and 10 oil companies for its other products.

GEOGRAPHIC MARKETS

- More than 90% of ACI's fiscal 1984 revenue was derived from the U.S. Less than 10% was derived from foreign sources.

- ACI has delivered 65 software packages to 48 North American (U.S. and Canada) customers and 29 software packages to 24 foreign customers, as shown below:

	Total Number of Installations		
Products/Markets	U.S. and Canada	Foreign	Total
ATM	41	24	65
Teller	7	3	10
POS	10	0	10
Videotex	4	2	6
AFS	3	0	3
Total	65	29	94

- ACI maintains U.S. sales offices in Clearwater (FL), Parsippany (NJ), Larkspur (CA), and Omaha (NE).

- Sales outside North America are handled by Applied Communications Ltd. in London, England, as well as by independent distributors in Australia, Singapore, and South America.

©1985 by INPUT. Reproduction Prohibited.

COMPUTER HARDWARE

- ACI has three computer systems installed in the U.S. as follows:
 - Tandem System A:
 - 6 Tandem NonStop IIs.
 - 4 Tandem NonStop TXPs.
 - 11 disk drives.
 - 10 printers.
 - 2 88 asynchronous devices.
 - Tandem System B:
 - 4 Tandem NonStop IIs.
 - 6 drives.
 - Tandem System X:
 - 2 Tandem NonStop IIs.
- Applied Communications Ltd. has one computer system installed as follows:
 - Tandem System UK.
 - 3 Tandem NonStop IIs.
 - 3 Tandem NonStop TXPs.

©1985 by INPUT. Reproduction Prohibited.

APPLIED DATA RESEARCH, INC.
Route 206 & Orchard Road, CN-8
Princeton, NJ 08540
(201) 874-9000

John R. Bennett, Chairman and CEO
Dennis F. Strigl, President
Wholly Owned Subsidiary of Ameritech
Total Employees: 1,800
Total Revenue, Fiscal Year End
12/31/86: $132,365,000

THE COMPANY

- Applied Data Research (ADR), founded in 1959, is a leading supplier of utility, application development, and data base management systems software products. The company also offers contract professional services.

- ADR operated as a publicly owned corporation from 1965 through most of 1985. In December 1985 and January 1986 Ameritech acquired 100% of the outstanding common stock of ADR for a cash price of $217.5 million. ADR now operates as a wholly owned subsidiary of Ameritech.

- In September 1986 at the company's annual users meeting ADR management outlined the company's strategy to pursue microcomputer and local area network versions of its mainframe products.

- In October 1986, Dennis F. Strigl, president of Ameritech Mobile Communications, became president and chief operating officer of ADR. He succeeded ADR co-founder Martin A. Goetz, who was named to the newly-created position of senior vice president/chief technology officer, a job change requested by Goetz. William T. Clifford was promoted to executive vice president.

- ADR's 1986 revenue was $132.4 million. This figure reflected changes in revenue recognition procedures resulting from ADR's acquisition by Ameritech. A five-year revenue summary follows:

APPLIED DATA RESEARCH, INC.
FIVE-YEAR REVENUE SUMMARY
($ thousands)

FISCAL YEAR / ITEM	1986	1985	1984	1983	1982
Revenue	$132,365	$150,000	$128,204	$89,086	$68,390
. Percent increase from previous year	*	17%	44%	30%	31%

*Comparison to previous year's results is not meaningful.

©1987 by INPUT. Reproduction Prohibited.

- Revenue for the three months ending March 31, 1987 reached $34.3 million, a 41% increase over the comparable period in 1986.
- ADR is currently organized into one division and five subsidiaries as follows:
 - Software Products Division (SPD) primarily develops and markets systems software for IBM and compatible mainframes.
 - ADR Services, Inc. (ADRSI) provides consulting and custom programming services.
 - Massachusetts Computer Associates, Inc. (COMPASS) is a research facility and consulting organization.
 - ADR Europe markets ADR's proprietary software products in Austria, Belgium, France, Germany, The Netherlands, Sweden, Switzerland, and the United Kingdom.
 - ADR International Corporation provides international marketing of ADR's products and services, excluding Europe.
 - ADR Applied Data Research Canada Ltd. markets ADR software products in Canada.
- Acquisitions made by ADR include the following:
 - In February 1987 ADR acquired the software technology for XDB, an SQL-based relational data base management system for IBM microcomputers, local area networks, and other minicomputer and microcomputer systems, from Software Systems Technology, Inc. (STT).
 - Under the agreement ADR obtains a worldwide license to develop software products incorporating XDB technology.
 - STT will continue to offer XDB as a standalone product and license XDB technology to other OEMs.
- As of December 31, 1986, ADR had 1,800 employees. The company currently has approximately 1,800 employees.
- Major competitors of ADR's systems software products include IBM, Software AG of North America, Cullinet Software, Cincom Systems, and Pansophic Systems.

KEY PRODUCTS AND SERVICES

- INPUT estimates approximately 87% of ADR's 1986 revenue was derived from software products, 7% from professional services, and 6% from interest and other income.

©1987 by INPUT. Reproduction Prohibited.

- ADR's software includes data base management, application development, on-line programming, office automation, decision support, and performance measurement products for IBM and compatible mainframes, as well as micro-computer-based products.

 - ADR currently has over 22,500 product installations worldwide representing over 9,000 clients.

- All the software products currently marketed by ADR are listed in the exhibit.

- Recent significant announcements made by ADR include the following:

 - In February 1986 the State University of New York signed an estimated $2 million five-year contract for ADR software products.

 - In March 1986 ADR announced a series of pricing policy changes for its software products. ADR introduced a monthly term lease price with a six-month minimum for all its products to reflect the expected long-term life of its software.

 - In March 1986 ADR signed a complementary development agreement with Ashton-Tate which provides for direct information exchange between ADR's DATACOM/DB mainframe data base management system and Ashton-Tate's dBASE II and III software through ADR's PC DATACOM micro/mainframe product.

 - In May 1986, ADR delivered a series of enhancements to ADR/IDEAL, its fourth generation application development system, which provided a 30-50% improvement in CPU time per on-line transaction, average on-line transaction storage, temporary storage I/O, and CPU time for batch processing. Later in the year, ADR announced ADR/IDEAL and ADR/DATAQUERY would support SQL-based data base managers such as IBM's DB2 and Teradata's DBC 10/12 data base computer.

 - In June 1986, ADR/The LIBRARIAN, through a series of enhancements, became the first library management system that allows data to be shared across IBM's CMS, MVS, and VSE operating systems.

 - In July 1986, ADR introduced ADR/LOOK/DATACOM, a real-time performance measurement system that monitors and analyzes a relational data base management system, operating system, and tele-processing monitor in relation to each other.

 - At its CADRE user group meeting in September 1986, ADR announced new products and extensions of its existing product line to support corporate information systems across multiple IBM-based machine architectures and operating systems. ADR previewed ADR/IDEAL-ESCORT, which supports the development of departmental applications on minicomputers and local area networks.

©1987 by INPUT. Reproduction Prohibited.

EXHIBIT

ADR SOFTWARE PRODUCTS

PRODUCT	DESCRIPTION	PERMANENT LICENSE BASE PRICE RANGE(a)	NUMBER INSTALLED (b)
ADR/IDEAL	Interactive application development and execution system	$ 73,200- $ 97,900	1,010
ADR/DATACOM/DB	Relational data base management system	$114,500-$145,900	1,456
ADR/D-NET	Distributed data processing system	$ 32,100- $ 41,300	102
ADR/DATADICTIONARY	Information repository	$ 32,600- $ 39,600	1,415
ADR/DATAQUERY	Interactive relational query system	$ 28,100-$ 34,800	1,247
ADR/DE II	Data collection system	$ 19,500- $ 24,500	100
ADR/LOOK/DATACOM	DBMS performance measurement	$ 35,000	N/A
ADR TOTAL TRANSPARENCY	Migration software	$ 29,500- $ 39,500	N/A
ADR/DL 1 TRANSPARENCY	Migration software	$ 40,000- $ 50,000	100
ADR/VSAM TRANSPARENCY	Migration software	$ 20,000- $ 25,300	726
ADR/ The LIBRARIAN	Program maintenance and control	$ 19,000- $ 29,000	6,025
ADR/ROSCOE	System for interactive program development in an OS environment	$ 60,400	1,773
ADR/VOLLIE	Interactive program development system for a VSE environment	$ 20,600	2,094
ADR/LOOK	Performance measurement	$ 12,600- $ 35,100	1,422
ADR/ETC	Word processing	$ 22,500- $ 30,100	524
ADR/METACOBOL	COBOL program development and maintenance	$ 9,700- $ 12,200	812
ADR/DL	Structured COBOL- language extension	$ 23,500- $ 28,600	N/A
ADR/eMAIL	Electronic mail system	$ 21,500- $ 35,000	314
ADR/EMPIRE	Decision support system	$ 45,000- $ 60,000	183
ADR/PC DATACOM	Micro-to-mainframe relational data base link	$ 495	1,300
ADR/PC eMAIL	Micro extended electronic mail facility	$ 195	N/A
ADE/PC EMPIRE	Decision support facility	$ 195	N/A
ADR/PC PEER	Integrated micro spreadsheet	$ 595	N/A
ADR/ADLIB	PC/LAN programming tool	$ 495	N/A
ADR/IDEAL-ESCORT	4GL PC application tool	$ 1,000	N/A
ADROIT	Computer-based training system	$ 5,500	N/A

(a) Effective 6/87
(b) Company estimate

©1987 by INPUT. Reproduction Prohibited.

- In December 1986, ADR issued release 2.0 of The VSAM TRANSPARENCY, which supports COBOL, Assembler, PL/I, and RPG languages in batch and on-line using IBM's Subsystem Interface conventions.

- In January 1987, ADR issued release 1.4 of ADR/IDEAL which improved system throughput by 25%, response by 20%, CPU utilization by 15%, and temporary storage I/O by 25%.

- In January 1987, ADR issued release 3.6 of ADR/The LIBRARIAN which allows TSO/ISPF users to easily update and control source code.

- In January 1987, ADR issued release 4.0 of ADR/VOLLIE, the first on-line program development system that allows data to be shared between VSE and VM/CMS.

- In February 1987, ADR issued Release 3.0 of ADR/eMAIL which allows ADR/eMAIL users to communicate with users of DISOSS-supported systems without the need for multiple screen entries.

- In March 1987, 3M Company signed an agreement to purchase up to $7 million of ADR software for installation at more than 20 international sites.

- In March 1987, Volvo Component AB signed a contract to purchase $640,000 of ADR software, with an option to purchase an additional $200,000.

- In April 1987, ADR issued release 3.0 of ADR/LOOK which allows users to identify and correct specific areas that can cause system degradation.

- In May 1987, ADR released ADLIB, a PC-based workstation for the development and maintenance of applications for mainframe, microcomputer, or shared use.

- In June 1987, ADR released ADR/IDEAL-ESCORT, a fourth generation application development tool that supports distributed applications and departmental processing through a LAN environment.

- In June 1987, ADR created an independent business unit to develop and market its ADROIT computer-based training system to end-user education markets.

- In June 1987, ADR issued new releases of DATACOM/DB and DATADICTIONARY which provide advanced support for MVS/XA, VSE/SP Version 2, and multiprocessor mainframes, and support data base prototyping with change control.

©1987 by INPUT. Reproduction Prohibited.

- In June 1987, Banque Indosuez of Paris, France signed an agreement to purchase an additional $1.5 million worth of ADR software for installation at five additional banking systems.

- In June 1987, ADR released ADR/TOTAL TRANSPARENCY, which permits migration of data from Cincom's TOTAL data base system to ADR/DATACOM/DB.

- ADR has strategic alliances with numerous systems and application software vendors who have enhanced their products to operate with ADR's DATACOM/DB relational data base management system. These include Actron Data System, American Management Systems, American Software, Ashton-Tate, Beta Systems, BGS Systems, Comserv, Data Design Associates, Global Software, Integral Systems, I.P. Sharp, Lawson Associates, McCormack and Dodge, Management Science America, Packaged Automated Life/Liability Management (PALLM), Software Alliance, Symbolics Financial Systems, Teradata, Tesseract, Thomas-Laguban & Associates, and Walker Interactive Products.

- Professional services are provided by ADR as follows:

 - ADR Services, Inc. (ADRSI) specializes in the development of applications and systems using ADR software products. Since 1965 ADRSI has completed over 1,000 projects for commercial and government clients. Contract examples include:

 . The development of a complete management system for a major transportation authority including warehousing, receiving, purchasing, stock issue and transfer, and inventory control functions.

 . The design and implementation of software to interface an IBM 3081 with another via a block multiplexer channel for banking terminal applications.

 . The implementation and operation of an on-line edit management system for the U.S. Army to link all Army research laboratories into a central data base.

 . System support and data base administration services for a major client.

 . Assistance in the requirement analysis and system definition of a large military reserve management and mobilization system.

 - Massachusetts Computer Associates, Inc. (COMPASS) is primarily involved in developing software in the areas of programming languages and operating environments, distributed processing, language translators, and real-time systems. Contract examples include:

©1987 by INPUT. Reproduction Prohibited.

- Developing a high performance Fortran compiler for Suprenum, the first supercomputer developed in the Federal Republic of Germany. Suprenum is targeted for scientific and technical markets. COMPASS was selected because of its accomplishments in developing high performance compilers which realize the full processing power of supercomputers.

- An agreement to license and adapt the technology of the COMPASS Fortran Compiler for use with the Connection Machine® of Thinking Machines Corporation of Cambridge (MA). The COMPASS compiler complements supercomputers such as the Connection Machine by ensuring that the full benefits of the hardware--speed and flexibility--can be realized. The Compiler's design provides the ability to program a large, flexibly-linked cluster of processors as a single system.

- ADR also provides fee-based consulting services in the areas of information resource planning, information systems analysis, data administration, conceptual data modeling, information systems design, and data base design.

- ADR provides a full range of education services to its clients including regularly scheduled courses covering ADR products and methodologies at Learning Centers located throughout North America and Western Europe. For ongoing on-site educational needs, ADR has developed a series of videotapes and computer-based training (CBT) modules.

INDUSTRY MARKETS

- ADR's products and services are sold across industry sectors.

GEOGRAPHIC MARKETS

- ADR's 1986 revenue was derived approximately as follows:

U.S.	57
Europe	24
Other international	19
	100%

- U.S. field offices are located in metropolitan Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Houston, Kansas City, Los Angeles, Minneapolis, New York City, Philadelphia, Rochester, San Francisco, Seattle, and Washington, D.C.

- ADR has subsidiary offices in Austria, Belgium, Canada, France, Germany, The Netherlands, Sweden, Switzerland, and the United Kingdom.

©1987 by INPUT. Reproduction Prohibited.

- Other international sales representatives are in Argentina, Australia, Brazil, Chile, Columbia, Denmark, Ecuador, Finland, Israel, Italy, Japan, Korea, Kuwait, Malaysia, Mexico, New Zealand, Norway, Peru, Philippines, Portugal, Puerto Rico, Singapore, Spain, Taiwan, and Venezuela.

COMPUTER HARDWARE AND SOFTWARE

- ADR has the following computers installed at its data centers in Princeton and Dallas:

 - Princeton.

 . 1 IBM 3083-JX, VM.
 . 1 IBM 3090-400, MVS/XA.
 . 1 IBM 4361-L4, DOS/VSE.
 . 1 DEC VAX 11/780, VMS.

 - Dallas.

 . 1 DEC VAX 11/780, VMS.

©1987 by INPUT. Reproduction Prohibited.

FINANCIAL UPDATED TO PROFILE DATED JULY 1983*

APPLIED DATA RESEARCH, INC.
Route 206 & Orchard Road, CN-8
Princeton, NJ 08540
(201) 874-9000

John R. Bennett, Chairman and CEO
Martin A. Goetz, President
Public Corporation, AMEX
Total Employees: 1,560
Total Revenue, Fiscal Year End 12/31/84: $128,204,000

APPLIED DATA RESEARCH, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	1984	1983	1982	1981	1980
Revenue	$128,204	$89,086	$68,390	$52,264	$37,126
. Percent increase from previous year	44%	30%	31%	41%	29%
Income before taxes	$ 16,213	$11,619	$ 6,744	$ 4,994	$ 1,225
. Percent increase from previous year	40%	72%	35%	308%	604%
Net income	$ 9,663	$ 6,984	$ 4,737	$ 3,074	$ 905
. Percent increase from previous year	38%	47%	54%	240%	72%
Earnings per share (a)	$ 1.76	$ 1.35	$ 1.09	$ 0.86	$ 0.29
. Percent increase from previous year	30%	24%	27%	197%	71%

(a) Adjusted for 5% stock dividends declared May 25, 1982 and March 13, 1984 and for a two-for-one stock split declared March 9, 1983.

SOURCE OF REVENUE

- Approximately 92% ($117.4 million) of Applied Data Research's 1984 revenue was derived from software products, 5% ($6.8 million) from professional services, and 3% ($4 million) from interest and other income.
 - Software licenses and leases represented 60-65% of total revenue and maintenance contracts contributed 25-30%.
 - Application development and data base products contributed 48% to total revenue.

*Replaces Financial Update of April 1984

©1985 by INPUT. Reproduction Prohibited.

- ADR has formalized joint marketing and development agreements with Management Science America, McCormack & Dodge, American Software, Integral Systems, Inc., Walker Interactive Products, and Comserv Corporation.

©1985 by INPUT. Reproduction Prohibited.

APPLIED DATA RESEARCH, INC.
Route 206 & Orchard Road, CN-8
Princeton, NJ 08540
(201) 874-9000

John R. Bennett, Chairman and President
Public Corporation, AMEX
Total Employees: 930
Total Revenue, Fiscal Year End 12/31/82: $68,390,000

THE COMPANY

- Applied Data Research (ADR), founded in 1959, is a leading supplier of utility and data base management systems software products. The company also offers applications software and contract professional services.

- 1982 revenue reached $68.4 million, a 31% increase over 1981 revenue of $52.3 million. Net income rose 54% from $3.1 million in 1981 to $4.7 million in 1982. A five-year financial summary follows:

APPLIED DATA RESEARCH, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	1982	1981	1980	1979	1978
Revenue	$68,390	$52,264	$37,126	$28,686	$22,627
. Percent increase from previous year	31%	41%	29%	27%	34%
Income before taxes	$ 6,744	$ 4,994	$ 1,225	$ 174	$ 3,025
. Percent increase (decrease) from previous year	35%	308%	604%	(94%)	0%
Net income	$ 4,737	$ 3,074	$ 905	$ 525	$ 1,977
. Percent increase (decrease) from previous year	54%	240%	72%	(73%)	21%
Earnings per share (a)	$ 1.15	$ 0.91	$ 0.30	$ 0.18	$ 0.67
. Percent increase (decrease) from previous year	26%	203%	67%	(73%)	8%

(a) Adjusted for a 5% stock dividend declared May 25, 1982 and for a two-for-one stock split declared March 9, 1983.

©1983 by INPUT. Reproduction Prohibited.

- Of ADR's 31% growth in 1982 revenue, approximately 21% was from increased sales volume and 10% from product price increases.
 - Sales increases resulted primarily from the implementation of new marketing strategies including the introduction of noncancellable license agreements and the creation of a National Accounts marketing concept allowing for structured volume discount arrangements for multisite software installations.
 - 1982 profit margins reached 6.9%, as compared to 5.9% in 1981 and 3.3% in 1980.
 - Growth in 1981 net income was the result of continuing integration of ADR's product line, introducing of new products and product enhancements, and a successful restructuring of the company's sales force.
- Effective September 1, 1981, ADR and Storer Broadcasting Company entered into a joint venture agreement to form ADR/CADRE, Inc., in which ADR has 49% interest. ADR/CADRE markets the CADRE cable television franchise turnkey product formerly available through ADR's CADRE Division.
 - As a result of the joint venture, ADR realized a 1981 pre-tax gain of $750,000 from the sale of its rights to the CADRE product.
 - ADR's share of the joint venture's loss was $103,000 in 1981 and $877,000 in 1982.
 - In May 1983 a new company, Magnicom Systems, was formed as a result of a joint venture agreement between ADR/CADRE, Inc. and Control Data Corporation.
 - The new company is 60% owned by CDC and 40% owned by ADR/CADRE and will offer the turnkey cable system and a software product for the broadcasting industry.
- Research and development costs were $8.8 million (13% of revenue) in 1982 and $6.1 million (12% of revenue) in 1981.
- Revenue for the six months ending June 30, 1983 reached $34.1 million, a 14% increase over $29.8 million for the same period in 1982. ADR registered a net loss of $238,000 for the six months as compared to net income of $1.4 million in 1982.
 - Management stated that the loss was due to revenue shortfall resulting from delays in billing for products tied to its new product, IDEAL, and to recent industry product announcements which temporarily slowed customer decisions on new data base product orders.
- ADR is organized into two divisions and several subsidiaries.

©1983 by INPUT. Reproduction Prohibited.

- Software Products Division (SPD) primarily develops and markets systems software for IBM and plug compatible mainframes. In 1982 SPD took over development and sales activities for the mainframe version of the EMPIRE decision support software product previously marketed through the Applications Products Division.

- Applications Products Division (APD) develops and markets applications software for DEC and various other minicomputers running under UNIX, as well as microcomputers.

- ADR Services, Inc. (ADRSI) provides consulting and custom programming services.

- Massachusetts Computer Associates, Inc. (COMPASS) is a research facility and consulting organization.

- ADR Europe markets ADR's proprietary software products in Austria, Belgium, France, Germany, The Netherlands, Sweden, Switzerland, and the United Kingdom.

- ADR International Corp. provides international marketing of ADR's products and services, excluding Europe.

- ADR Applied Data Research Canada Ltd. markets ADR software products in Canada.

- As of December 31, 1982 ADR had 930 employees. The company currently has approximately 965 employees.

- Major competitors of ADR's systems software products include IBM, Software Ag of North America, Cullinet Software, Cincom Systems, and Pansophic Systems.

KEY PRODUCTS AND SERVICES

- A summary of source of revenue for 1982 and 1981 is reported by ADR as follows:

	1982		1981	
	Revenue ($ millions)	Percent of Total	Revenue ($ millions)	Percent of Total
Systems software	$58.0	85%	$44.6	85%
Applications software	2.8	4	2.1	4
Professional services	4.6	7	3.0	6
Turnkey systems	-	-	0.7	1
Other (interest)	3.0	4	1.9	4
	$68.4	100%	$52.3	100%

©1983 by INPUT. Reproduction Prohibited.

- All software products currently marketed by ADR are listed in the exhibit.
- ADR's Software Products Division (SPD) is responsible for the development, marketing, support, and integration of its data base, applications development, office automation, decision support, and performance measurement software products.
 - The more than 1,500 product installations in 1982 brought SPD's total to over 15,000. The products run on IBM and compatible mainframes.
 - Maintenance revenue from software product customers was $17.2 million in 1982, compared to $17.8 million in 1981. The slight decrease was primarily due to a change in accounting procedures for maintenance contracts.
 - Revenue from ADR's DATACOM (Data Base Management and Data Communications) product line reached $13.1 million in 1982, up 77% from $7.4 million in 1981.
 - Other software products generating the majority of 1982 revenue include ADR/LIBRARIAN ($13 million), ADR/ROSCOE ($11.4 million), and ADR/VOLLIE ($7.8 million).
 - SPD is now responsible for development and marketing of the IBM mainframe version of EMPIRE, a decision support system.
 - EMPIRE provides a high-level modeling language, interactive analyses, and graphics for financial management.
 - There are currently over 250 installations of EMPIRE.
 - ADR has licensed EMPIRE to approximately 24 companies for use on their timesharing networks.
 - Recent SPD software product offerings now available include:
 - IDEAL, an interactive application development and implementation system.
 - DATA DESIGNER, a data base design tool.
 - DATA ENTRY, a generalized data collection system.
 - D-NET, a distributed data processing system.
 - EMAIL, an electronic mail system.
 - During 1982, ADR was awarded a $14.2 million, 10-year subcontract from the U.S. Army for software packages and installation support for Project VIABLE (Vertical Installation Automation Base Line).

©1983 by INPUT. Reproduction Prohibited.

EXHIBIT

APPLIED DATA RESEARCH SOFTWARE PRODUCTS

PRODUCT	DESCRIPTION	1982 REVENUE ($ millions)	BASE PRICE RANGE (a)	NUMBER INSTALLED (b)
ADR/LIBRARIAN®	Program maintenance and control	$13.0	$15,200 - 24,700	5,500
ADR/ROSCOE®	System for interactive program development in an OS environment	11.4	40,400 - 47,300	1,200
ADR/VOLLIE®	Interactive program development system for use in DOS/OS environment	7.8	18,700 - 25,500	1,600
ADR/ DATACOM/DB T.M.	Data base management system	7.2	44,700 - 73,000 (Base price)	350
ADR/ DATACOM/DC T.M.	Data communications control system	1.6	32,700 - 51,500 (Base price)	250
ADR/DATA DICTIONARY T.M.	Data control system	2.7	21,100 - 32,600	350
ADR/ DATAQUERY T.M.	Interactive relational query system	0.8	11,000 - 17,900	200+
ADR/ DATAREPORTER T.M.	Information retrieval and reporting system	0.6	7,700 - 12,300	170
ADR/ DATAENTRY T.M.	Data collection system	0.2	7,700 - 12,700	N/A
ADR/LOOK®	Performance measurement	3.9	8,200 - 29,500	1,000+
ADR/ETC T.M.	Word processing	3.0	13,700 - 23,600	400
ADR/ METACOBOL®	COBOL program development and maintenance	2.9	6,600 - 10,500 (Base price)	780
ADR/ EMPIRE®	Financial modeling and decision support system	2.8	48,000 - 70,000	250
ADR/ AUTOFLOW® II	Program documentation tool	0.4	6,000 - 8,200 (Base price)	2,500
ADR/ EMAIL T.M.	Electronic mail system	0.3	14,500 - 27,500	80
ADR/ASC®	Produces systems-level charts and documentation	0.2	13,100	120+
ADR/DL T.M.	Structured COBOL-language extension	N/A	19,100 - 31,300 (Requires ROSCOE or VOLLIE)	N/A
ADR/DATA DESIGNER T.M.	Data base design tool	N/A	37,500	N/A
ADR/IDEAL T.M.	Interactive application development and execution system	NEW	50,000 - 75,000	N/A
ADR/D-NET T.M.	Distributed data processing system	NEW	21,800 - 35,700	N/A

(a) Effective July 1983
(b) Company estimate

©1983 by INPUT. Reproduction Prohibited.

. The contract, which was awarded to Electronic Data Systems (EDS), involves a large-scale restructuring of military information processing capabilities and establishment of a nationwide network using ADR software. The network will allow 47 military bases access to five processing centers located across the U.S.

- In October 1982 ADR and EDS entered into a joint marketing agreement under which 15 of ADR's software products are being offered as applications on EDS's Optimum Systems Division network.

- In June 1983 ADR announced plans with VisiCorp to develop integrated IBM mainframe and personal computer software for data base, office automation, decision support, and program development systems.

 . ADR will develop a series of software products to run on the IBM Personal Computer (PC) integrated with VisiCorp's Visi On™ Open Applications System and ADR mainframe software.

 - Integration of ADR's mainframe and personal computer software with the Visi On system will be accomplished through ADR's Information Distribution Architecture™ (IDA) allowing information interchange between the mainframe and PCs.

 - Products scheduled for availability during the first quarter of 1984 include ADR/PC DATACOM™, a personal computer-based relational information management facility; ADR/PC EMAIL™, an extended electronic mail facility; ADR/PC EMPIRE®, a decision support facility; and ADR/PC ROSCOE® and ADR/PC VOLLIE®, programmer productivity tools for the personal computer.

 - ADR will market both companies' Visi On products to IBM mainframe sites worldwide, and VisiCorp will provide technical support.

 . ADR will also develop interproduct components including ADR/LINK™, ADR/EDITOR™, and ADR/SIGNON™, to integrate its mainframe software with ADR and VisiCorp personal computer software.

- The Application Products Division (APD) redefined its focus in 1982 to concentrate on product development for DEC VAX, DECSYSTEM-10, DECSYSTEM-20, and other minicomputers running under UNIX, as well as microcomputers.

 - APD continues to market and support EMPIRE for DEC users and provide consulting services to EMPIRE licensees for requirements analysis, specification development, model design, and implementation.

©1983 by INPUT. Reproduction Prohibited.

- FOUNDATION, an on-line information management system sold as an adjunct to EMPIRE or as a standalone system, is no longer available from ADR.

- APD announced plans in 1982 to develop and market a series of products for the DEC Professional personal computer, with availability scheduled for the fourth quarter of 1983. The products include:

 - ADR/DATA, a personal information management system.

 - ADR/STATS, a statistical analysis and forecasting system.

 - ADR/GRAPH, a graphics system.

- Professional services are provided by two ADR subsidiaries:

 - ADRSI, founded in 1966, develops custom software and systems primarily for government clients. Contract examples follow.

 - In 1982 ADRSI converted existing client applications to ADR's DATACOM/DB data base management system for the U.S. Army's Aberdeen Proving Ground and for Alexander's stores.

 - ADRSI also contracted with Computer Sciences Corporation to provide the Saudi Arabian Petroleum Ministry with ADR products modified to feature product support in the Arabic language.

 - The subsidiary won a bid for a follow-on contract for programming services in support of the U.S. Navy's Air Logistics Command Management Information System. Follow-on contracts were also received from Four-Phase Systems, Inc. and Rockwell International.

 - ADRSI has provided professional services involving the design, development, and implementation of the Army's Continental Management Information System.

 - Massachusetts Computer Associates, Inc. (COMPASS), founded in 1961, is primarily involved in developing software in the areas of programming languages and operating environments, distributed processing, language translators, and real-time systems.

 - During 1982 COMPASS continued working on Ada, the new programming language sponsored by the Department of Defense, and the UNIX operating system. Other research activities focused on personal computers, programmer workstations, and computer graphics.

©1983 by INPUT. Reproduction Prohibited.

- COMPASS was first selected in 1974 and continues to act as the prime contractor for the National Software Works, a government-sponsored project addressing the needs of Department of Defense networked computing system users.

- Commercial client activities included the development of an office automation system for a major communications company, the design and development of a networking system for a process control manufacturer, and continued work with a major manufacturer of automated test equipment.

INDUSTRY MARKETS

- ADR's products and services are sold across industry sectors.

GEOGRAPHIC MARKETS

- ADR's 1982 revenue was derived as follows:

U.S.	70%
Europe	23
Other international	7
	100%

- U.S. sales offices are located in Atlanta, Boston, Chicago, Cleveland, Dallas, Houston, Los Angeles, Minneapolis, New York City, San Francisco, and Washington, D.C.

- ADR has subsidiary offices in Austria, Belgium, Canada, France, Germany, The Netherlands, Sweden, Switzerland, and the United Kingdom.

- Other international sales representatives are in Argentina, Australia, Brazil, Chile, Columbia, Denmark, Ecuador, Finland, Greece, Hong Kong, Israel, Italy, Japan, Korea, Kuwait, Malaysia, Mexico, New Zealand, Norway, Peru, Philippines, Portugal, Puerto Rico, South Africa, Singapore, Spain, Taiwan, Thailand, Trinidad, and Venezuela.

COMPUTER HARDWARE AND SOFTWARE

- ADR has the following mainframes installed:

 - 1 IBM 4341, operating under DOS/VS(E), in Dallas
 - 1 IBM 4341, operating under DOS/VS(E), in Princeton.

©1983 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

APPLIED DATA RESEARCH, INC.
Route 206 & Orchard Road, CN-8
Princeton, NJ 08540
(201) 874-9000

John R. Bennett, President
Public Corporation, AMEX
Total Employees: 675
Total Revenue, Fiscal Year End 12/31/80: $37,125,650

THE COMPANY

- Applied Data Research (ADR), founded in 1959, is a leading supplier of system software products. ADR specialized in marketing utility software until its 1978 acquisition of the DATACOM product line from Insyte Corporation, marking ADR's entry into selling data base management systems. ADR also offers applications software, a turnkey system, and contract professional services.

- Revenue for 1980 was $37.1 million, a 29% increase over 1979 revenue of $28.7 million. Pretax income and earnings per share increased over 1979 but were still below levels achieved in prior years. A five-year summary follows:

APPLIED DATA RESEARCH, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	1980	1979	1978	1977	1976
Total revenue	$37,126	$28,686	$22,627	$16,930	$12,913
. Percent increase from previous year	29%	27%	34%	31%	34%
Income before taxes	$ 1,225	$ 174	$ 3,025	$ 3,029	$ 1,791
. Percent increase (decrease) from previous year	604%	(94%)	(0.1%)	69%	159%
Net income	$ 905	$ 525	$ 1,977	$ 1,637	$ 1,440
. Percent increase (decrease) from previous year	72%	(73%)	21%	14%	233%
Earnings per common share	$ 0.63	$ 0.38	$ 1.41	$ 1.19	$ 1.11
. Percent increase (decrease) from previous year	66%	(73%)	18%	7%	208%

©1981 by INPUT. Reproduction Prohibited.

- Although pretax income rose 600% over the prior year's income, the company's profit margin was only 3.3%.

 . Expenses associated with the data base management products acquired late in 1978, expenses for development of the CADRE T.M. cable television system, and costs associated with the establishment of European marketing subsidiaries were a smaller percentage of revenue in 1980 than in 1979. However, these improvements were largely offset by increased expenses for marketing, administrative, and development functions in anticipation of a higher level of revenue than was actually achieved.

 . The revenue shortfall was due to delays in the installation of system software products and delays in the completion of new and enhanced products. Such delays contributed to the increased backlog from $3.8 million on December 31, 1979, to $9 million on December 31, 1980.

 . In addition, the company incurred a first-time provision of $321,000 for compensation relating to stock appreciation rights.

 . Interest expense increased 206% to $1.2 million in 1980 as a result of increased borrowing (including the full first year's interest expense relating to the company's new world headquarters) and higher interest rates.

 . Borrowings increased to support long-term receivables held by the company, primarily as a result of a higher proportion of the company's customers electing to license the company's products for a limited term and to pay on a deferred basis.

- Effective January 1, 1981, ADR agreed to acquire an additional marketing subsidiary from its distributor in France at an estimated cost of $400,000 to $600,000. In 1979, ADR purchased five other European software marketing companies from the CAP-CPP group in Austria, Belgium, Germany, Holland, and Switzerland.

- ADR is organized into three divisions and several subsidiaries.

 - Software Products Division develops and markets systems software for IBM and IBM-compatible computers.

 - Applications Products Division develops and markets EMPIRE, a decision support system, and FOUNDATION an application development system for use by nonprogrammers.

©1981 by INPUT. Reproduction Prohibited.

- CADRE Division markets a turnkey product for cable television franchises. Effective September 1, 1981, the company entered into a joint venture agreement to form a corporation, ADR Cadre Inc., to develop and market this product.

- ADR Services, Inc. (ADRSI) provides consulting and custom programming services.

- Massachusetts Computer Associates, Inc. (COMPASS) is a research facility and consulting organization.

- ADR International, Inc. provides international marketing of ADR's products and services.

- ADR Applied Data Research Canada Ltd. markets ADR software products in Canada.

- ADR has subsidiaries in Austria, Belgium, Canada, France, Germany, Netherlands, Sweden, Switzerland, and the United Kingdom which market ADR's proprietary software products.

- As of June 30, 1981, ADR's 675 employees were distributed as follows:

- Marketing/Sales	
. Salespersons	115
. Customer Support and Training	94
. Marketing Administration	62
- General Administration	215
- Programming and Support	189
	675

KEY PRODUCTS AND SERVICES

- ADR reports revenue in two major areas ($ thousands):

	1980	1979	1978	1977
Proprietary software products				
. Operating revenue*	$33,585	$25,311	$18,776	$13,806
. Pretax income	3,546	2,612	3,975	3,534
Professional services				
. Operating revenue*	2,742	2,908	3,665	2,921
. Pretax income	147	46	267	569

*Before corporate and interest expenses.

©1981 by INPUT. Reproduction Prohibited.

- 1980 revenue by product/service was:

	$ Millions	Percent
System Products	$31.7	86%
Application Products	1.1	3
Turnkey Products	0.5	1
Professional Services	2.9	8
Other (interest)	0.9	2
	$37.1	100%

- ADR's system software products are written for IBM and IBM-compatible equipment.
 - The DATACOM Data Base and Data Communication (DB/DC) products were integrated into ADR's existing product line during 1980. They contributed $4.5 million to 1980 revenue, up 92% from 1979. Although modestly profitable after the 1979 loss of $2 million, the DATACOM line fell substantially short of profit margins experienced on other systems products.
 - Maintenance and rental fees contributed $11.5 million and $2.1 million respectively to 1980 revenue. These together represented 34% of ADR's total revenue.
 - ADR is in the midst of a three-year research and development effort to enhance and integrate its existing systems software product line. R&D expenditures in 1980 were $3.8 million.
- ADR's EMPIRE and FOUNDATION application products are written for DEC-10, DEC-20, VAX, IBM 370 and compatible systems.
 - The EMPIRE Decision Support System is used for financial modeling and reporting. By 1980, it reached an installed base of over 80 systems and had annual revenue exceeding $1 million.
 - In addition to its modeling capabilities, EMPIRE provides fully interactive facilities for data handling, reporting, graphics, statistical analysis, and evaluation of alternative planning assumptions.
 - ADR has licensed EMPIRE to 16 companies for use on their timesharing networks, including Citishare, American Management Systems, Computer Sharing Services, and Sun Information Services.
 - International sales of EMPIRE have increased to include users in Canada, South America, Europe, and the Orient.
 - The FOUNDATION Management Information System, announced in late 1980, provides application development facilities to nonprogrammers in an interactive environment.

©1981 by INPUT. Reproduction Prohibited.

 - . System features include: concurrent accessing of up to ten data bases, data entry and validation, sorting, subset selection, computations and manipulation, reporting, and editing.

 - . FOUNDATION is sold as an adjunct to EMPIRE and as a standalone system.

- ADR recently announced IDEAL, an application development tool for 370-type machines that provides users in VSI, MVS, and VSE environments with a high-level language. This new package is scheduled for general release in the spring of 1982.

- All software products marketed by ADR are listed in the exhibit.

- CADRE (Computerized Automatic Data Retrieval and Entry) is a turnkey system for cable television franchise operations.

 - The system offers on-line order entry, billing and management information.

 - CADRE is sold on DEC (Model #11750 and #11780). Cost of the software only ranges from $60,000 to $220,000.

 - By year end 1980, five systems were installed. 1980 revenue contribution for the product was about $450,000.

- Professional services are provided by two ADR subsidiaries:

 - ADRSI specializes in telecommunications, educational surveys, facilities management, and information systems for the government. In 1980, ADRSI was awarded its largest single contract involving redesign and conversion of the Army's R&D On-Line Edit (OLE) system.

 - Massachusetts Computer Associates, Inc. (COMPASS) is primarily involved in research and development in the areas of computer programs, architecture, and applications.

 - . Contracts include: assisting in the design of the Ada Integrated Environment for the U.S. Air Force; developing an advanced programming environment for a large hardware/software systems integrator; developing automatic test equipment software for customers in both the public and private sectors.

 - . COMPASS also developed, and now markets, two software products, Vectorizer and Fortran Output Expeditor.

INDUSTRY MARKETS ADR's systems and applications software products are sold across all industry sectors. The one industry specialty product is CADRE, for cable television franchises.

©1981 by INPUT. Reproduction Prohibited.

EXHIBIT

APPLIED DATA RESEARCH - SOFTWARE PRODUCTS

PRODUCT	DESCRIPTION	1980 REVENUE ($ millions)	PRICE RANGE	NUMBER INSTALLED
ROSCOE®	System for interactive program development in an OS environment	$8.8	$ 35,500 - 55,500	1,000
VOLLIE T.M.	Interactive program development system for use in DOS/OS environment	5.3	15,500 - 23,000	1,050
LIBRARIAN®	Program maintenance and control	7.3	7,500 - 22,500	5,000
METACOBOL®	COBOL program development and maintenance	1.6	14,500 - 72,500	600
LOOK®	Performance measurement	2.6	4,000 - 17,000	800
ETC T.M.	Word processing	0.9	8,500 - 18,500	150
AUTOMATED SYSTEM CHARTER®	Produces systems-level charts and documentation	0.2	10,500	100
AUTOFLOW II	Program documentation tool	0.3	5,000 - 47,000	2,500
DATACOM/DB	Data base management system	4.3	51,500 - 156,500	200
DATACOM/DC	Data communications control system		19,500 - 72,500	200
DATA DICTIONARY	Data control system		16,500 - 26,000	150
EMPIRE	Financial modeling and decision support system	1.1	48,000 - 70,000	80
FOUNDATION	On-line information management system for accessing and manipulating decentralized data files	0	30,000 - 35,000	New product

©1981 by INPUT. Reproduction Prohibited.

GEOGRAPHIC MARKETS ($ millions)

	1980	1979	1978	1977	1976
United States	$ 22.7	$ 17.4	$ 12.2	$ 10.2	$ 8.0
International	14.5	11.4	10.4	6.7	4.9

- U.S. sales offices are located in Atlanta, Boston, Chicago, Cleveland, Dallas, Houston, Los Angeles, New York, Philadelphia, San Francisco, and Washington, DC.

- ADR has subsidiary offices in Austria, Belgium, Canada, France, Germany, Netherlands, Sweden, Switzerland, and the United Kingdom.

- Other international sales representatives are in Argentina, Australia, Brazil, Denmark, Finland, Hong Kong, Israel, Italy, Japan, Korea, Malaysia, New Zealand, Norway, Philippines, South Africa, Singapore, Taiwan, Thailand, and Venezuela.

COMPUTER HARDWARE

- 1 IBM 4341 located in Dallas, TX.
- 1 IBM 4341 located in Princeton, NJ.

©1981 by INPUT. Reproduction Prohibited.

12/31/79 $28,686,306

COMPANY HIGHLIGHT

APPLIED DATA RESEARCH, INC.
Route 206 Center, CN-8
Princeton, NJ 08540
(609) 921-8550

John L. Bennett, President
Public Corporation, AMEX
Total Employees: 450
Total Revenues, Fiscal Year End 12/31/78: $22,627,238

THE COMPANY

- Applied Data Research (ADR) was founded in 1959 by seven people including Martin A. Goetz (Senior Vice President), Henry R. Wickenden (Chairman of the Board and Vice President), and Steve Wright (Senior Consultant) to write contract software. ADR is presently engaged in the development and marketing of proprietary software products and provides professional services in the computer and data processing field.

- Operating subsidiaries of ADR are:

 - ADR Services, Inc. (ADRSI), Washington, DC: provides consulting services.
 - Massachusetts Computer Associates, Inc. (COMPASS), Boston: research facility and consulting organization.
 - ADR International, Inc: international marketing of ADR's products and services.
 - ADR Applied Data Research Canada Ltd.: markets ADR software products in Canada.

- Revenues for 1978 reached $22.6 million, compared with $16.9 million for 1977, a 33% increase. Net income was a record $1,976,591 in 1978, 21% above $1,636,531 in 1977. A five year summary follows:

FIVE YEAR FINANCIAL SUMMARY, ADR
($ Thousands)

ITEM \ FISCAL YEAR	1978	1977	1976	1975	1974
Operating revenues	$22,627	$16,930	$12,913	$9,613	$8,357
Earnings from continuing operations before income taxes	3,025	3,029	1,791	692	1,038
Net earnings	1,977	1,637	1,440	432	49

- ADR management attributes growth in revenues to an increase in sales of 28% in the Software Products Division, the acquisition of the software business of

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

Insyte Corporation (now known as the Datacom Division of Applied Data Research, Inc.), and substantial expansion of the professional services operations.

- Effective September 1, 1978 ADR acquired the Datacom line of products from Insyte Corporation. The acquisition of the Data Base and Data Communications (DB/DC) software products marks ADR's entry into the data base management software market.

- Prior to December 1, 1977, ADR manufactured telephone control and monitoring products. In December, 1977 ADR sold its telecommunication subsidiary to Communications Group, Inc. (CGI) for a 6% long term note receivable in the amount of $1,524,163 and 10% of the outstanding shares of common stock of CGI.

 - CGI has sustained operating losses in its recent operations and deferred principal payments for the quarters ended December 1, 1978 and March 1, 1979.
 - ADR management reviewed CGI's plan for achieving profitable operations and financing operations and believes CGI can resume contractual obligations to ADR in 1979.

- Effective May 1, 1979, ADR agreed to purchase five European software product marketing companies from the CAP-CPP group, headquartered in London. The companies have marketed ADR's product line for three years. According to management, the purchase was prompted by the company's interest in establishing closer control of a significant part of its overseas operation. The agreement affected companies located in Holland, Germany, Belgium, Austria, and Switzerland. ADR's representative in the United Kingdom remains affliated with CAP-CPP.

- ADR's 450 employees are distributed as follows:

-	Marketing/Sales	
	. Salespersons	40
	. Customer Support and Training	80
	. Marketing administration	50
-	General Administration	80
-	Programming and Support	200
		450

KEY PRODUCTS AND SERVICES

- Software products generated 83% of ADR's total revenue in 1978. The contribution of each of ADR's industry segments for the last five years is shown below:

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

FINANCIAL INFORMATION RELATING TO INDUSTRY SEGMENTS, ADR
($ Thousands)

INDUSTRY SEGMENT / FISCAL YEAR	1978	1977	1976	1975	1974
Proprietary software products	$18,776	$13,806	$10,440	$6,725	$6,512
Professional services	3,665	2,921	2,310	2,756	1,768
Corporate (Finance Charges)	186	203	163	132	77

- International sales of ADR's products accounted for 53% of Software Products Division (SPD) revenues in 1978. Total software product sales increased 34% over revenues reported in 1977.

- Prior to the acquisition of Datacom, ADR sold only utility software products designed to assist IBM Systems/360, 370, 303X, 4300 and other IBM plug-compatible computer users in designing, implementing, testing and maintaining computer programs. ADR's major product, ROSCOE®, accounted for approximately $6 million in 1978 sales which was 26.5% of total company revenues and 32% of SPD revenues.

- A description of ADR's software products giving pricing information, 1978 revenue contribution, number of installations, and year introduced is contained in Exhibit A.

- ADR Services, Inc. (ADRSI) provides professional services in the metropolitan Washington, DC area. This subsidiary accounted for approximately $2 million of total revenues in 1978. ADRSI specializes in telecommunication, educational surveys, facilities management, financial management, and information systems for the government. Other specialties include transportation, environmental control, energy conservation, and education.

 - Although government contracts account for most of its volume, ADRSI has increased its commercial base to 25% of total revenues.
 - In late 1977, ADRSI began marketing a financial modeling analysis and reporting system called EMPIRE.
 - EMPIRE, in use by over 100 organizations, is being used by private corporations as well as academic institutions for use in their educational programs and research.
 - EMPIRE was previously available for installation only on large-scale computer systems, but is now offered on a wide variety of minicomputers and licenses at an average price of $30,000.
 - Marketing for EMPIRE is handled by the Princeton, NJ office.

- ADR's research subsidiary, Massachusetts Computer Associates, Inc. (COMPASS), continues to contribute to the theoretical and practical aspects of computer science and has recently opened a West coast office in Los Angeles.

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

EXHIBIT A

SOFTWARE PRODUCTS

APPLIED DATA RESEARCH INC.

NAME OF PRODUCT	APPLICATION	AVER-AGE PRICE	NUMBER OF INSTA-LATIONS	1978 REVE-NUES	YEAR FIRST OFFERED
ROSCOE[R]	SYSTEM FOR INTER-ACTIVE PROGRAM DE-VELOPMENT IN AN OS ENVIRONMENT	$31,000	550	$6.3M	1969
VOLLIE[TM]	INTERACTIVE PROGRAM DEVELOPMENT SYSTEM FOR USE IN DOS/OS ENVIRONMENT	$12,300	260	$1.865M	1977
LIBRARIAN[R] AND LIBRARIAN/ ON-LINE	PROGRAM MAINTENANCE AND CONTROL	$11,550	4,500	$5.672M	1969
META COBOL[R] PRODUCT	COBOL PROGRAM DE-VELOPMENT AND MAIN-TENANCE • COBOL/DV • COBOL/SP • COBOL/IMS • COBOL/QDM • COBOL/CP • COBOL/MP	- $11,000 $11,000 $11,500 $10,000 $11,000 $ 8,500	500	$1.081M	1970

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

SOFTWARE PRODUCTS
APPLIED DATA RESEARCH INC.

NAME OF PRODUCT	APPLICATION	AVERAGE PRICE	NUMBER OF INSTALLATIONS	1978 REVENUES	YEAR FIRST OFFERED
LOOK[R] WITH OPTION: EXTENDED PERFORMANCE ANALYZER (EPA)	PERFORMANCE MEASUREMENT	$10,700	600	$1.708M	1975
ON-LINE ETC[TM]	WORD PROCESSING	$10,500	100	$154,000	1974
AUTOMATED SYSTEM CHARTER[R] (ASC)	PRODUCES SYSTEMS-LEVEL CHARTS AND AND DOCUMENTATION	$ 7,450	100	$183,000	1974
AUTO FLOW II	PROGRAM DOCUMENTATION TOOL	$ 7,250	2200	$336,000	1966

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

SOFTWARE PRODUCTS
APPLIED DATA RESEARCH INC.

NAME OF PRODUCT	APPLICATION	AVERAGE PRICE	NUMBER OF INSTALLATIONS	1978 REVENUES	YEAR FIRST OFFERED
DATACOM/DB • DATA-QUERY™ • DATA REPORTER™	DATA BASE MANAGEMENT SYSTEM QUERY LANGUAGE RETRIEVAL AND REPORTING FACILITY	$40,700 $ 8,500 $ 8,250	100	$415,000*	1974
DATACOM/DC • DATA ENTRY	DATA COMMUNICATIONS CONTROL SYSTEM ON-LINE DATA ENTRY FACILITY	$34,500 $ 5,500	100	$220,000*	1972
DATA DICTIONARY	DATA CONTROL SYSTEM	$13,500	25	$ 74,000*	1978

*FOR PERIOD SEPTEMBER 1, 1978 ONLY.

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

- COMPASS has established a reputation for the research and development of highly optimized code, for unusual programming languages, and computer architectures.
- The VECTORIZER system is marketed by COMPASS and was introduced in 1977. It is a sophisticated tool for computers having a vector processing capability, such as those manufactured by Cray and Control Data Corporation. There are eight installations.
- Also offered by COMPASS is the FORTRAN Output Expediter, an optimizing system for users of IBM machines, with 15 installations.

INDUSTRY MARKETS Since ADR's software products are general programming tools available for the IBM Systems/360, 370, 303X and 4300 user market, ADR's products are applicable for use in every industry sector. The U.S. government accounted for 21% of revenues in 1978.

GEOGRAPHIC MARKETS ADR's customers are located in all regions of the U.S. Sales to customers in foreign countries totaled $9,488,278 in 1978, 42% of total revenue. Of that total, 77% of sales related to Europe.

COMPUTER HARDWARE ADR does not have any in-house computers.

© 1979 by INPUT, Palo Alto, CA 94303. Reproduction Prohibited.

COMPANY HIGHLIGHT

APPLIED DATA RESEARCH
Route 206 Center, CN-8
Princeton, NJ 08540
(609) 921-8550

John R. Bennett, President
Public corporation, AMEX
Total employees: 270
Operating revenues, fiscal year end 12/31/76: $15,762,484.

THE COMPANY

- Applied Data Research (ADR) is a profitable and rapidly growing software, contract programming, and communications hardware company. In 1976, revenues increased to $15.8 million; up 24%, from 1975 revenues of $12,738,765. Net earnings grew 233% in the same period, from $431,736 to $1,440,164. Fully diluted net earnings per share of common stock grew from $.36 to $1.11 with 1.2 million shares outstanding.

- ADR management is concentrating on internal growth (primarily IBM-compatable software packages); there is not a strong emphasis on acquisitions. The company's growth is limited by a relatively small sales force which cannot cover IBM sites in the U.S.

- ADR is well positioned to take advantage of the growth opportunities in the software and communications tester market with products which are both unique and well received.

KEY PRODUCTS AND SERVICES

- Software products which generated 66% of ADR revenues in 1976, are expected to have the fastest growth of any ADR product, as shown below:

PRODUCT	1976 Revenues	% of Total	Projected Growth Annual
Software Products	$ 10.4	66.2%	25%
Communication Hardware	2.8	17.8	8
Contract Programming	2.5	16.0	6%
TOTAL	$ 15.7	100.0%	

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

COMPANY HIGHLIGHT/APPLIED DATA RESEARCH

- The software packages are all utility products designed to assist IBM 360/370 users to design, implement, test, maintain, and control their data processing requirements as well as reduce the cost of operations.

 - ADR derives 50% of its software revenues from overseas.

 - "Librarian," ADR's most successful product, accounted for one-third of total company sales in 1976.

 - Other products include MetaCOBOL, ROSCOE, LOOK, Extended Text Compositor, and Automated System Charter.

 - The following chart depicts ADR software packages.

UTILITY PACKAGES SOLD BY ADR

Name of Product	Applications	Average Price	# of Users	1976 Revs.	Competitors
Autoflow	Systems design tool	$10K	2000	$.7M	Unique (No Comp)
Roscoe	Interactive prog. development tool	40K	300	3.2M	IBM TSO
Librarian	Data Storage & manipulation	7K	3500	4.8M	Pansophic Systems
Meta COBOL	COBOL optimization prog.	12K	300	.8M	Unique DBMS
Look	Performance Measure. tool	$ 6K	250	.7M	Boole & Babbage; Hardware
Miscellaneous	Misc.			$.2	
Total number of products sold: 6,350 Total number of communications customers: 150			TOTAL	$10.4M	

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited.

- In addition, ADR manufactures telephone control and monitoring products including the Star Telephone Center Management System, the Automatic Call Analyzer, and the Telephone Control and Accounting System. Over 150 STAR systems are installed in the U.S. and Canada.

- ADR provides professional services and contract programming through two research subsidiaries: ADR Services, Inc. (ADRSI) Washington, D.C.; and Massachusetts Computer Associates, Inc. (COMPASS) Boston, Massachusetts.

 - ADRSI performs requirements analysis, planning, design, development, and systems management services for government and industrial mainframe and minicomputer users.

 - COMPASS performs systems engineering, software development and research, and specialized language development for government and industrial users.

- ADR employees have grown from 200 in 1976 to 270 in 1977. They are distributed through the following functions:

Total Marketing		60
- Software Sales	20	
- Hardware Sales	7	
- Marketing Support & Administration	33	
R & D		20
Operations (includes 45 in Contract Programming)		150
Administration		40
TOTAL		270

© 1977 by INPUT, Menlo Park, CA. 94025. Reproduction Prohibited. INPUT

APPLIED DATA RESEARCH, INC.
Route 206 Center
Princeton, New Jersey 08540
(609) 921-8550

John R. Bennett, President
Public corporation, widely held
Total company sales as of FY ending 12/75: $12,500,000*
Computer services sales 12/75: $10,000,000

NUMBER OF EMPLOYEES engaged in computer services: 200

KEY PRODUCTS/SERVICES: Systems software is the mainstay of ADR, representing 80% of computer services sales. The Company also markets software (professional) services in conjunction with sales and implementation of software products. The best selling software products are:

- AUTOFLOW: a systems development tool for analyzing output, and which produces cross-referenced listings.
- ROSCOE (Remote OS Conversational Operating Environment): provides conversational approach to program development.
- The LIBRARIAN: a source program and control system which provides data storage and minipulation facilities for data processing personnel.
- MetaCOBOL: testing and maintenance via terminals, for assisting in testing, debugging, coding, standardizing, converting and optimizing COBOL programs.

APPLICATIONS: ADR's products are systems oriented.

INDUSTRY MARKETS: ADR revenues are fairly evenly distributed across several industries. Government represents 25% of the business and manufacturing 20%. Other industries served are distribution, banking/finance, insurance, education, medical/hospital, utilities, and transportation.

GEOGRAPHIC MARKETS: Over a third of ADR's computer services business is outside the U.S., primarily in Europe. U.S. branch and sales offices are located in the following metropolitan areas:

Boston, Massachusetts
Chicago, Illinois
Cleveland, Ohio
Dallas, Texas
Houston, Texas
Los Angeles, California
New York, New York
Pittsburgh, Pennsylvania
Philadelphia, Pennsylvania
Princeton, New Jersey
Washington, District of Columbia

Network multiplexors are located in Boston, Chicago, New York, Philadelphia, Princeton and Washington, D.C.

COMPUTER HARDWARE AND SOFTWARE: The software division uses a service bureau for its IBM 370 access.

OVERALL ASSESSMENT AND TRENDS: Founded in 1959, ADR is certainly among the "grand-daddies" of the software companies. ADR's success in the software products market can be attributed largely to being an early arrival in the market, as well as having good technical personnel. With over 3000 users, ADR is enjoying its royalties from its extremely successful LIBRARIAN and AUTOFLOW II. The only major attempt to expand has been creation of the time-sharing division. Called TELEPLEX, it was discontinued in April, 1975. ADR will not likely assume an aggressive stance in the market in the foreseeable future and hence, computer services sales will reach $20 million at the most, by 1980.

*Note: Final sales figures for 1975 revised since printing of Directory.

Out

COMPANY HIGHLIGHT

APPLIED DATA PROCESSING INCORPORATED
33 Bernhard Road
North Haven, CT 06473
(203) 787-4107

David W. Chaffin, President
Public corporation (OTC)
Total employees: 115
Total sales fiscal year end 12/31/77: $2,640,000
Computer services revenues: $2,330,000

THE COMPANY

- Applied Data Processing Incorporated (ADPI) became a Connecticut corporation in 1961. During 1977 it was merged with Computer Databanks, Inc., a publicly held Delaware corporation founded in 1969. ADPI began as a batch service bureau; today, it offers turnkey systems and professional services as well.
 - Currently, computer services represent approximately 88% of total 1977 revenues.
 - Non-computer services revenues are from leases and rentals of hardware associated with the sale of turnkey systems.
- Net income for fiscal 1977 exceeded income before tax and extraordinary items, as shown in the table below. This is due mostly to federal income tax credits available to employers who hired new employees, but also to investment credits.

Five Year Financial Summary of ADPI
($ 000)

Item \ Fiscal Year	1978 6 mos.	Annual Data 1977	1976	1975	1974	1973
Total revenues	$1,678	$2,663	$2,542	$2,260	$1,838	$1,574
Income before tax and extraordinary items	$ 180	69	249	297	130	172
Income after tax and extraordinary items	$ 87	84	162	162	48	92
Percent of income to total revenue	5.2%	3.2%	6.4%	7.2%	2.6%	5.8%
No. of employees	115	115	110	99	84	78

© 1978 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

- ADPI has about 300 stockholders; the stock is traded infrequently.

KEY PRODUCTS AND SERVICES

- ADPI offers batch processing services, professional services, and turnkey systems to over 500 customers. The company's annual revenues are derived as shown in the table below:

Service	Year 1977		1976
Batch processing	85%		83%
Packaged applications	38	43	
Customized applications	38	34	
Data entry/keypunch	9	6	
Programming (one time only)	3		4
Turnkey systems (including hardware and software)	12		13
TOTAL	100%		100%

- ADPI offers both packaged and customized processing services.
 - Packaged processing services, available to multiple users, currently include:
 - Payroll
 - Keypay, phone-in payroll
 - Accounts payable
 - Accounts receivable
 - General ledger and financial statements
 - School class scheduling
 - School grade reporting
 - School enumeration
 - Medical billing for visiting school nurses
 - Customized processing services currently include:
 - Bills of material
 - Inventory management
 - Sales analysis
 - Production scheduling
 - Cost control
 - Order processing
 - Invoicing
 - Selective direct mail
 - Quality control
 - Market survey analysis
 - Operations research
 - Fund raising

© 1978 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

- Data entry services provide keypunch and key-to-disk services to customers who process data prepared on their in-house systems as well as to those who use ADPI's batch processing service.

- Resource/100, ADPI's turnkey system, was introduced in 1975. It offers manufacturers a tailored version of many of the applications available to users of custom and package processing. These applications include:

 - Payroll
 - Sales analysis
 - Inventory control
 - Order entry
 - Invoicing
 - Accounts payable
 - Accounts receivable
 - General ledger
 - Financial statements

- Management expects the number of Resource/100 installations to increase from the current 12 to approximately 40 units by the end of 1980.

 - The system utilizes a Data General Nova 3 minicomputer with from 64K to 256K Core memory and peripherals manufactured by a variety of vendors. The operating systems, MICOS, and all the hardware are supplied by Minicomputer Systems, Inc., of New York. Applications software (written in BASIC) and marketing are done by ADPI.
 - Software enhancements by ADPI account for an estimated 25% of turnkey systems revenues or 3% of total revenues.
 - A typical system sells for between $60,000 and $70,000; however, a system can be purchased for as little as $40,000.

- One time programming services entail charging custom programming and processing customers separately for the use of customized programs. Users of packaged routine processing, in contrast, are not charged extra for the use of applications programs.

- Both general business and industry specialized processing services are offered by ADPI.

 - General business applications account for about 88% of revenues and include such applications shown above as accounts payable, accounts receivable, general ledger, and payroll.

© 1978 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

- Industry specialized applications generate about 15% of processing services revenues and include scheduling, report cards and visiting nurses for schools (education industry). Also included are inventory control, bill-of-material and accounting applications for the manufacturing industry.

- Although ADPI advertises its software products, the firm does not actively pursue this market and software product revenues are negligible.

APPLICATIONS Approximately 76% of fiscal 1977 revenues were generated by general business processing services, 15% by industry specialty services for manufacturers and schools, and 9% by utility services.

INDUSTRY MARKETS Computer services revenues for both fiscal 1976 and 1977 were distributed as follows:

Manufacturing	39%
Transportation	2
Banking and finance	5
Education	2
Retail distribution	3
Wholesale distribution	16
Services (includes CPAs, law firms, real estate firms, cleaning establishments, etc.)	27
Other: construction	6
	100%

GEOGRAPHIC MARKETS

- One hundred percent of the company's fiscal 1977 revenues were derived from the New England states: 95% from Connecticut and 5% from Massachusetts and Rhode Island.

- Branch offices are all located in Connecticut: Bridgeport, North Haven, and West Hartford.

COMPUTER HARDWARE AND SOFTWARE

- An IBM 360/50, running under DOS, performs batch processing.

- Twelve Data General Nova 3s, modified by and purchased from Minicomputers Systems, Inc., are installed in Resource/100 systems at user sites.

© 1978 by INPUT, Menlo Park, CA 94025. Reproduction Prohibited.

FINANCIAL UPDATE TO HIGHLIGHT DATED JULY 1983

APPLIED DATA RESEARCH, INC.
Route 206 & Orchard Road, CN-8
Princeton, NJ 08540
(201) 874-9000

John R. Bennett, Chairman and CEO
Martin A. Goetz, President
Public Corporation, AMEX
Total Employees: 1,200
Total Revenue, Fiscal Year End 12/31/83: $89,086,000

APPLIED DATA RESEARCH, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	1983	1982	1981	1980	1979
Revenue	$89,086	$68,390	$52,264	$37,126	$28,686
. Percent increase from previous year	30%	31%	41%	29%	27%
Income before taxes	$11,619	$ 6,744	$ 4,994	$ 1,225	$ 174
. Percent increase (decrease) from previous year	72%	35%	308%	604%	(94%)
Net income	$ 6,984	$ 4,737	$ 3,074	$ 905	$ 525
. Percent increase (decrease) from previous year	47%	54%	240%	72%	(73%)
Earnings per share (a)	$ 1.35	$ 1.09	$ 0.86	$ 0.29	$ 0.17
. Percent increase (decrease) from previous year	24%	27%	197%	71%	N/A

(a) Adjusted for 5% stock dividends declared May 25, 1982 and March 13, 1984 and for a two-for-one stock split declared March 9, 1983.

SOURCE OF REVENUE

- Approximately 91% ($81 million) of Applied Data Research's 1983 revenue was derived from software products, 5% ($4.5 million) from professional services, and 4% ($3.6 million) from interest and other income.

© 1984 by INPUT. Reproduction Prohibited.

APPLIED DATA RESEARCH, INC.
Route 206 & Orchard Road, CN-8
Princeton, NJ 08540
(201) 874-9000

John R. Bennett, President
Public Corporation, AMEX
Total Employees: 675
Total Revenue, Fiscal Year End 12/31/80: $37,125,650

THE COMPANY

- Applied Data Research (ADR), founded in 1959, is a leading supplier of system software products. ADR specialized in marketing utility software until its 1978 acquisition of the DATACOM product line from Insyte Corporation, marking ADR's entry into selling data base management systems. ADR also offers applications software, a turnkey system, and contract professional services.

- Revenue for 1980 was $37.1 million, a 29% increase over 1979 revenue of $28.7 million. Pretax income and earnings per share increased over 1979 but were still below levels achieved in prior years. A five-year summary follows:

APPLIED DATA RESEARCH, INC.
FIVE-YEAR FINANCIAL SUMMARY
($ thousands, except per share data)

ITEM \ FISCAL YEAR	1980	1979	1978	1977	1976
Total revenue	$37,126	$28,686	$22,627	$16,930	$12,913
. Percent increase from previous year	29%	27%	34%	31%	34%
Income before taxes	$ 1,225	$ 174	$ 3,025	$ 3,029	$ 1,791
. Percent increase (decrease) from previous year	604%	(94%)	(0.1%)	69%	159%
Net income	$ 905	$ 525	$ 1,977	$ 1,637	$ 1,440
. Percent increase (decrease) from previous year	72%	(73%)	21%	14%	233%
Earnings per common share	$ 0.63	$ 0.38	$ 1.41	$ 1.19	$ 1.11
. Percent increase (decrease) from previous year	66%	(73%)	18%	7%	208%

©1981 by INPUT. Reproduction Prohibited.

- Although pretax income rose 600% over the prior year's income, the company's profit margin was only 3.3%.

 - Expenses associated with the data base management products acquired late in 1978, expenses for development of the CADRE™ cable television system, and costs associated with the establishment of European marketing subsidiaries were a smaller percentage of revenue in 1980 than in 1979. However, these improvements were largely offset by increased expenses for marketing, administrative, and development functions in anticipation of a higher level of revenue than was actually achieved.

 - The revenue shortfall was due to delays in the installation of system software products and delays in the completion of new and enhanced products. Such delays contributed to the increased backlog from $3.8 million on December 31, 1979, to $9 million on December 31, 1980.

 - In addition, the company incurred a first-time provision of $321,000 for compensation relating to stock appreciation rights.

 - Interest expense increased 206% to $1.2 million in 1980 as a result of increased borrowing (including the full first year's interest expense relating to the company's new world headquarters) and higher interest rates.

 - Borrowings increased to support long-term receivables held by the company, primarily as a result of a higher proportion of the company's customers electing to license the company's products for a limited term and to pay on a deferred basis.

- Effective January 1, 1981, ADR agreed to acquire an additional marketing subsidiary from its distributor in France at an estimated cost of $400,000 to $600,000. In 1979, ADR purchased five other European software marketing companies from the CAP-CPP group in Austria, Belgium, Germany, Holland, and Switzerland.

- ADR is organized into three divisions and several subsidiaries.

 - Software Products Division develops and markets systems software for IBM and IBM-compatible computers.

 - Applications Products Division develops and markets EMPIRE, a decision support system, and FOUNDATION an application development system for use by nonprogrammers.

©1981 by INPUT. Reproduction Prohibited.

- CADRE Division markets a turnkey product for cable television franchises. Effective September 1, 1981, the company entered into a joint venture agreement to form a corporation, ADR Cadre Inc., to develop and market this product.

- ADR Services, Inc. (ADRSI) provides consulting and custom programming services.

- Massachusetts Computer Associates, Inc. (COMPASS) is a research facility and consulting organization.

- ADR International, Inc. provides international marketing of ADR's products and services.

- ADR Applied Data Research Canada Ltd. markets ADR software products in Canada.

- ADR has subsidiaries in Austria, Belgium, Canada, France, Germany, Netherlands, Sweden, Switzerland, and the United Kingdom which market ADR's proprietary software products.

- As of June 30, 1981, ADR's 675 employees were distributed as follows:

- Marketing/Sales	
. Salespersons	115
. Customer Support and Training	94
. Marketing Administration	62
- General Administration	215
- Programming and Support	189
	675

KEY PRODUCTS AND SERVICES

- ADR reports revenue in two major areas ($ thousands):

	1980	1979	1978	1977
Proprietary software products				
. Operating revenue*	$33,585	$25,311	$18,776	$13,806
. Pretax income	3,546	2,612	3,975	3,534
Professional services				
. Operating revenue*	2,742	2,908	3,665	2,921
. Pretax income	147	46	267	569

*Before corporate and interest expenses.

©1981 by INPUT. Reproduction Prohibited.

- 1980 revenue by product/service was:

	$ Millions	Percent
System Products	$31.7	86%
Application Products	1.1	3
Turnkey Products	0.5	1
Professional Services	2.9	8
Other (interest)	0.9	2
	$37.1	100%

- ADR's system software products are written for IBM and IBM-compatible equipment.
 - The DATACOM Data Base and Data Communication (DB/DC) products were integrated into ADR's existing product line during 1980. They contributed $4.5 million to 1980 revenue, up 92% from 1979. Although modestly profitable after the 1979 loss of $2 million, the DATACOM line fell substantially short of profit margins experienced on other systems products.
 - Maintenance and rental fees contributed $11.5 million and $2.1 million respectively to 1980 revenue. These together represented 34% of ADR's total revenue.
 - ADR is in the midst of a three-year research and development effort to enhance and integrate its existing systems software product line. R&D expenditures in 1980 were $3.8 million.
- ADR's EMPIRE and FOUNDATION application products are written for DEC-10, DEC-20, VAX, IBM 370 and compatible systems.
 - The EMPIRE Decision Support System is used for financial modeling and reporting. By 1980, it reached an installed base of over 80 systems and had annual revenue exceeding $1 million.
 - In addition to its modeling capabilities, EMPIRE provides fully interactive facilities for data handling, reporting, graphics, statistical analysis, and evaluation of alternative planning assumptions.
 - ADR has licensed EMPIRE to 16 companies for use on their timesharing networks, including Citishare, American Management Systems, Computer Sharing Services, and Sun Information Services.
 - International sales of EMPIRE have increased to include users in Canada, South America, Europe, and the Orient.
 - The FOUNDATION Management Information System, announced in late 1980, provides application development facilities to nonprogrammers in an interactive environment.

©1981 by INPUT. Reproduction Prohibited.

 - . System features include: concurrent accessing of up to ten data bases, data entry and validation, sorting, subset selection, computations and manipulation, reporting, and editing.

 - . FOUNDATION is sold as an adjunct to EMPIRE and as a standalone system.

- ADR recently announced IDEAL, an application development tool for 370-type machines that provides users in VSI, MVS, and VSE environments with a high-level language. This new package is scheduled for general release in the spring of 1982.

- All software products marketed by ADR are listed in the exhibit.

- CADRE (Computerized Automatic Data Retrieval and Entry) is a turnkey system for cable television franchise operations.

 - The system offers on-line order entry, billing and management information.

 - CADRE is sold on DEC (Model #11750 and #11780). Cost of the software only ranges from $60,000 to $220,000.

 - By year end 1980, five systems were installed. 1980 revenue contribution for the product was about $450,000.

- Professional services are provided by two ADR subsidiaries:

 - ADRSI specializes in telecommunications, educational surveys, facilities management, and information systems for the government. In 1980, ADRSI was awarded its largest single contract involving redesign and conversion of the Army's R&D On-Line Edit (OLE) system.

 - Massachusetts Computer Associates, Inc. (COMPASS) is primarily involved in research and development in the areas of computer programs, architecture, and applications.

 - . Contracts include: assisting in the design of the Ada Integrated Environment for the U.S. Air Force; developing an advanced programming environment for a large hardware/software systems integrator; developing automatic test equipment software for customers in both the public and private sectors.

 - . COMPASS also developed, and now markets, two software products, Vectorizer and Fortran Output Expeditor.

INDUSTRY MARKETS ADR's systems and applications software products are sold across all industry sectors. The one industry specialty product is CADRE, for cable television franchises.

©1981 by INPUT. Reproduction Prohibited.

EXHIBIT

APPLIED DATA RESEARCH - SOFTWARE PRODUCTS

PRODUCT	DESCRIPTION	1980 REVENUE ($ millions)	PRICE RANGE	NUMBER INSTALLED
ROSCOE®	System for interactive program development in an OS environment	$8.8	$ 35,500 - 55,500	1,000
VOLLIE T.M.	Interactive program development system for use in DOS/OS environment	5.3	15,500 - 23,000	1,050
LIBRARIAN®	Program maintenance and control	7.3	7,500 - 22,500	5,000
METACOBOL®	COBOL program development and maintenance	1.6	14,500 - 72,500	600
LOOK®	Performance measurement	2.6	4,000 - 17,000	800
ETC T.M.	Word processing	0.9	8,500 - 18,500	150
AUTOMATED SYSTEM CHARTER®	Produces systems-level charts and documentation	0.2	10,500	100
AUTOFLOW II	Program documentation tool	0.3	5,000 - 47,000	2,500
DATACOM/DB	Data base management system	4.3	51,500 - 156,500	200
DATACOM/DC	Data communications control system		19,500 - 72,500	200
DATA DICTIONARY	Data control system		16,500 - 26,000	150
EMPIRE	Financial modeling and decision support system	1.1	48,000 - 70,000	80
FOUNDATION	On-line information management system for accessing and manipulating decentralized data files	0	30,000 - 35,000	New product

©1981 by INPUT. Reproduction Prohibited.

GEOGRAPHIC MARKETS ($ millions)

	1980	1979	1978	1977	1976
United States	$ 22.7	$ 17.4	$ 12.2	$ 10.2	$ 8.0
International	14.5	11.4	10.4	6.7	4.9

- U.S. sales offices are located in Atlanta, Boston, Chicago, Cleveland, Dallas, Houston, Los Angeles, New York, Philadelphia, San Francisco, and Washington, DC.
- ADR has subsidiary offices in Austria, Belgium, Canada, France, Germany, Netherlands, Sweden, Switzerland, and the United Kingdom.
- Other international sales representatives are in Argentina, Australia, Brazil, Denmark, Finland, Hong Kong, Israel, Italy, Japan, Korea, Malaysia, New Zealand, Norway, Philippines, South Africa, Singapore, Taiwan, Thailand, and Venezuela.

COMPUTER HARDWARE

- 1 IBM 4341 located in Dallas, TX.
- 1 IBM 4341 located in Princeton, NJ.

©1981 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

APPLIED FINANCIAL SYSTEMS, INC.
155 Bovet Road
San Mateo, California 94402
(415) 574-4940

Richard E. Lucas, President
Private corporation
Computer services employees: 50
Revenues, fiscal year 12/76: $1.5 million

COMPANY BACKGROUND:

- Applied Financial Systems (AFS) was founded in October, 1968 to provide shareholder accounting services to three mutual funds. At that time, it was a subsidiary of Winfield and Company, a mutual fund investment advisor.

- The company commenced operation as a mutual fund transfer agent, dividend disbursing, and shareholder services agent in mid-1969 with software purchased from Service Bureau Company.

- In 1973, Winfield and Company distributed its investment in AFS to its own shareholders. Thus, AFS is now a privately held, independent corporation.

- AFS provides services at three levels to the corporate, banking, insurance, and mutual fund communities. At the top level, AFS provides shareholder services including data processing intensive activities. At the next level, AFS provides to other transfer agents, or corporations acting as their own transfer agent, the EDP support necessary to operate a shareholder service system. As a further option, AFS will sell its software.

OVERALL ASSESSMENT:

- AFS is a highly specialized company competing in an industry segment dominated by Bradford National. Seventy percent of AFS' business is concentrated in California with the remainder evenly divided between Texas and the Mid-Atlantic region.

- Almost half its revenues come from shareholder services where AFS provides administrative services complementing data processing. Many of the contracts that AFS has are multi-year contracts. In addition, services are priced on a transaction basis.

- The base of activity that AFS has in shareholder/participant record services can be expanded both geographically and to other market segments, such as the insurance industry, and particularly those related to employee benefits and pension fund activities. It can also expand the services it provides to mutual funds.

- AFS' main strength is its software system in which close to a million dollars has been invested over the past five years. The quality of the software is represented by its installation in some of the largest banks and insurance companies in the United States.

KEY PRODUCTS AND SERVICES:

- AFS' present business is derived from three main sources:

 - Shareholder services includes a variety of data processing intensive transfer agency, shareholder accounting, back office and advisory services provided to the corporate and fund community. Within these are such functions as are necessary to enact and confirm shareholder and dealer transactions, prepare checks and certificates, maintain daily records of clients' outstanding share and cash positions, and provide the client and its shareholders a prompt and complete optional service, with CRTs in client offices, if desired.

 - EDP Shareholder Systems Services allows other transfer agents or corporations acting as their own transfer agent to operate in an on-line environment using AFS' computing center and application software in San Mateo, California. The customers in this category are integrated with all AFS' clients.

 - Systems Installations represents a third option a client or administrative agent might select from AFS. The programs developed and used by AFS and AFS' EDP Services customers can and are installed, in part or in whole, in locations across the country.

APPLICATIONS:

- AFS provides transfer agent services to corporations, banks, mutual funds, and insurance companies.

- The software system is actually available in two forms:

 - investment annuity management system, and

 - mutual fund corporate stockholder accounting system.

- There are also subsidiary products:
 - wire order system for distributor services to mutual funds
 - file extraction report writer language which works with AFS structures files.

INDUSTRY MARKETS:

- The majority of AFS' clients, at this time, are mutual funds, trusts, and partnerships.
- Recently, however, AFS has emphasized services to banks as opposed to mutual funds themselves. Banks are tending to contract with outside organizations to support their shareholder accounting services; this is one reason for Bradford's growth. Also an increasing number of corporations are expected to handle their own transfer activites, and this is another potential market for AFS.

GEOGRAPHIC MARKETS: The majority of AFS' clients are in Northern California with several in Los Angeles. Other clients are located in Texas and in the Mid-Atlantic area of the East Coast.

COMPUTER HARDWARE AND SOFTWARE: AFS offers on-line services through Four Phase CRT terminals from an IBM 360/50 using CICS.

APPLIED INFORMATION DEVELOPMENT, INC.
823 Commerce Drive
Oak Brook, IL 60521
(312) 654-3030

Lee Munder, Chairman
Steve Holland, President
Member of the Computer Power Group
Total Employees: 350
Total Revenue, Fiscal Year End 12/31/88: $29,000,000*
Information Services Revenue: $27,550,000*

*INPUT estimate

The Company

Applied Information Development, Inc., incorporated in 1968, is a wholly owned subsidiary of the Computer Power Group Americas. It offers a range of professional services, software products, and customized turnkey systems to both cross-industry and industry-specific markets, specializing in the manufacturing, distribution, retail, insurance, and banking industries.

INPUT estimates that Applied Information's 1988 revenues reached $29 million, a 12% increase over 1987 revenue of $26 million.

Applied Information considers its major competitors to include the major accounting firms, Computer Task Group, and CAP-Gemini America (CGA).

Key Products and Services

INPUT estimates that approximately 95% of Applied Information's 1988 revenue was from professional services. The remaining 5% of revenue was from customized turnkey and hardware product sales, including an automated ink jet control system for the printing industry, developed by Applied Information's Digital Engineering Group.

Applied Information offers the following professional services:

- Project management responsibilities are assumed for full management of the entire project or parts of a project. Applied Information's Project Manager's Handbook provides guidelines for project planning and estimating, project control and management reporting, and software quality assurance.

Copyright 1989 by INPUT. Reproduction Prohibited.

- Training in project management and testing for both users and MIS. Customized user application training for both internally developed systems and purchased packages is also provided.

- Software testing is provided for unit, integrations, and acceptance testing using the methods defined in Applied Information's Testing Management Handbook.

- Applied Information develops, implements, and supports software Quality programs. The support staff provides requirements and design reviews, code walk-throughs, standards development, and test plan inspections.

- Metrics analysis is provided to quantify the overall quality and productivity of the MIS organization. Applied Information can also determine the Critical Metric Set, a composite set of measurements critical to the effective management of the MIS function.

- Applied Information offers specialty consulting in the areas of 4GLs, CASE, RDBMS, and AS/400 systems.

- The User Services specialty promotes user involvement throughout the project life cycle. Specific areas include requirements definition, package selection and installation, acceptance testing, documentation, installation, and project management.

- Using the Conversion Manager's Handbook, the Applied Information staff offers migration and conversion assistance.

- Other consulting services include package selection/installation, maintenance management, technical consulting, and contract services.

- Mini/microcomputer services consist of:

 - Applied Information's Digital Engineering Group provides a wide range of services related to mini/microcomputer data acquisition and control systems. Services supplied involve conceptual and detailed design of real-time systems including hardware selection, systems and applications software development, and complete system integration and testing.

Copyright 1989 by INPUT. Reproduction Prohibited.

- Customized turnkey systems services including engineering of boards, controllers, computers, and software to meet special application needs, on either a prototyping or production basis.

A set of coordinated handbooks and manuals addressing productivity improvement are available, including a Project Manager's Handbook, Testing Management Handbook, Project Progress Reporting System, Conversion Manager's Handbook, Personnel Evaluation Package, Program Design, and COBOL Programming Guidelines.

Applied Information markets and supports the MCS^{R} (Manufacturing Control System).

- MCS modules include Distribution Requirements Planning, Resource Requirements Planning, and Capacity Requirements Planning.
- MCS runs on IBM 43xx, 308x, and compatibles under DOS/MVS.

Applied Information's JCLWTR storage and retrieval package was sold to Mobius Management Systems in 1987.

Industry Markets

Applied Information clients include Fortune 1000 and smaller firms in all industry sectors. Industries served include manufacturing, distribution, retail, banking, brokerage, insurance, utilities, communications, publishing, printing, transportation, government, and associations.

Geographic Markets

One hundred percent of Applied Information's 1988 revenue was derived from across the U.S., primarily from the Midwest.

Branch offices are located in Appleton and Milwaukee (WI), Detroit (MI), Houston (TX), Indianapolis (IN), Minneapolis/St. Paul (MN), Seattle (WA), St Louis (MO), and Cincinnati (OH).

Computer Hardware and Software

Applied Information maintains an IBM AS/400 and numerous microcomputers at its Oak Brook headquarters for internal use.

Copyright 1989 by INPUT. Reproduction Prohibited.

APPLIED INFORMATION
DEVELOPMENT, INC.
823 Commerce Drive
Oak Brook, IL 60521
(312) 654-3030

Lee Munder, Chairman
Steve Holland, President
Private Corporation
Total Employees: 325*
Total Revenue, Fiscal Year End
12/31/86: $23,000,000*
Computer Services Revenue:
$21,000,000*

THE COMPANY

- Applied Information Development, Inc. (AID) was incorporated in Illinois in 1968 by Lee Munder, Jerome Martin, Steve Holland, and Michael Merriman. In 1971 the company was acquired by Computing and Software Corporation (now Cordura Corporation) and subsequently was sold to System Development Corporation in 1974. AID's original founders repurchased the company in 1979.

- AID offers a broad range of professional services, software products, and customized turnkey systems to both cross-industry and industry-specific markets, with specialization in manufacturing, distribution, retail, insurance, and banking.

- INPUT estimates 1986 AID revenue at $23 million, a 15% increase over estimated revenue of $20 million in 1985. AID management states that the company has been profitable since inception.

- Competitors to AID in its professional services business include the Big 8 accounting firms, Computer Task Group, and CAP-Gemini America (CGA).

KEY PRODUCTS AND SERVICES

- INPUT estimates that approximately 85% of AID's 1986 revenue was from professional services and 5% from software packages. The remaining 10% of revenue was from hardware product sales including an automated ink jet control system for the printing industry developed by AID's Digital Engineering Group.

- AID provides a wide variety of professional services including consulting, development and implementation services, a productivity and quality assurance improvement program, and mini/microcomputer services.

 - Consulting services consist of two basic categories:

*INPUT estimate

©1987 by INPUT. Reproduction Prohibited.

- Management consulting includes planning studies, data processing organizational and operations reviews, and systems/programming reviews.

- Technical consulting involves hardware and software reviews and analyses, with expertise in mini/microcomputer selection and architecture, distributed data processing, data communications planning, data base design, and hardware operations.

- Systems development and implementation services include:

 - Total project management and systems development including planning, requirements analysis, systems design, programming, and installation.

 - Conversion capabilities based on AID's proprietary methodology tailored to clients' mainframe, language, operating system, and site conversion requirements.

 - Contract personnel provided for short-term or supplemental programming requirements.

- AID's Productivity Improvement Program provides a variety of unique quality assurance products and services designed to reduce development and maintenance costs.

 - A Quality Assurance Rating Index measures quality, timeliness, and costs at any point during a software development project.

 - Independent Software Test Teams prepare test cases, execute test runs, and supply problem reports for specific projects.

 - AID offers training programs, seminars, and consulting services for project management and control, systems development methodologies, testing, and determination of the focus and impact of the quality assurance effort on the client's data processing organization.

 - A set of coordinated handbooks and manuals addressing productivity improvement are available, including a Project Manager's Handbook, Testing Management Handbook, Project Progress Reporting System, Personnel Evaluation Package, and Program Design and COBOL Programming Guidelines.

- Mini/microcomputer services consist of:

 - AID's Digital Engineering Group, which provides a wide range of services related to mini/microcomputer data acquisition and control systems. Services supplied involve conceptual and detailed design of real-time systems including hardware

©1987 by INPUT. Reproduction Prohibited.

selection, systems and applications software development, and complete system integration and testing.

. Customized turnkey systems services including engineering of boards, controllers, computers, and software to meet special application needs, on either a prototyping or production basis.

- Representative examples of AID professional services assignments include:

 - Management consulting: providing an assessment to client management on a $35 million development project with emphasis on the anticipated time and cost to complete.

 - Technical consulting: performance of a tuning analysis of MVS and IMS systems for a major IMS DB/DC planned application that resulted in deferring the need for additional hardware.

 - System development: complete management and development of a sophisticated order entry system that resulted in a significant clerical force reduction and allowed the client to handle large increases in its business without additional order entry personnel.

 - Conversions: for one client, converting over 20 divisions to a centralized computer system.

 - Contract programming: staffing for a client's temporary needs, AID provided over 50 people for varying lengths of time, allowing the client to complete a major effort without adding permanent staff.

 - Productivity Improvement Program: to meet the strict controls required in a major financial institution, AID provided an independent test team to perform testing for a key new system.

 - Micro engineering: AID designed, engineered, prototyped, programmed, developed, and produced a network of microcomputer-based remote air quality monitoring systems connected to a centralized minicomputer for an environmental protection agency.

- AID currently offers two software packages.

 - AID-Manufacturing Control System (AID-MCS®) is a manufacturing control system introduced in 1978. A Basic Edit/Reporting System operates with AID-MCS's five optional subsystems, which include Distribution Requirements Planning, Master Production Scheduling, Material Requirements Planning, Resource Requirements Planning, and Capacity Requirements Planning.

 . AID-MCS runs on IBM 360, 370, 303X, 4300, and compatible mainframes under VM, MVS, OS, and DOS. There are over 25 installations of the product.

©1987 by INPUT. Reproduction Prohibited.

- AID-MCS license fees (effective April 1, 1986) follow. AID installation fees include certain software customization services.
 - First subsystem - $75,000*.
 - Second subsystem - $35,000.
 - Each additional application - $30,000.
 - Prices include 10 days of training for each subsystem. Multiple site pricing available on request.

 * Basic Edit/Parameter Maintenance and Reporting Function is supplied with first subsystem and is therefore not duplicated with subsequent subsystems.
- Software update and extended warranty services are available on an annual basis for 10% of the current one-time license fee per subsystem. The license fee includes 90-day warranty and update service after acceptance.

- AID introduced JCLWTR, an IBM JCL SYSOUT storage and retrieval system, in April 1983. JCLWTR coordinates and simplifies on-line and computer output microfilm (COM) access to JCL listings for MVS production jobs. The system runs on IBM and compatible mainframes under MVS.
 - Features include elimination of printing, bursting and filing of production JCL listings, a master index accessible through the TSO/system productivity facility, and support for Datagraphix's MICROCOM and Kodak's KOMSTAR COM interfaces.
 - JCLWTR is available for a one-time license fee of $15,000.

INDUSTRY MARKETS

- AID clients include Fortune 1000 and smaller firms in all industry sectors. Industries served include manufacturing, distribution, retail, banking, brokerage, insurance, utilities, communications, publishing, printing, transportation, government, and associations.

GEOGRAPHIC MARKETS

- One hundred percent of AID's 1986 revenue was derived from across the U.S., primarily from the Midwest.
- Branch offices are located in Milwaukee, Minneapolis/St. Paul, Hartford (CT), Seattle, St. Louis, Phoenix, Cincinnati, and San Francisco.

©1987 by INPUT. Reproduction Prohibited.

COMPUTER HARDWARE AND SOFTWARE

- AID maintains two DEC PDP-11s and numerous PCs at its Oak Brook headquarters for internal use.

©1987 by INPUT. Reproduction Prohibited.

COMPANY HIGHLIGHT

APPLIED INFORMATION DEVELOPMENT, INC.
823 Commerce Drive
Oak Brook, IL 60521
(312) 654-3030

Lee Munder, President
Private Corporation
Total Employees: 325*
Total Revenue, Fiscal Year End 12/31/82: $16,000,000*
Computer Services Revenue: $14,400,000*

THE COMPANY

- Applied Information Development, Inc. (AID) was incorporated in Illinois in 1968 by Lee Munder, Jerome Martin, Steve Holland, and Michael Merriman. In 1971 the company was acquired by Computing and Software Corporation (now Cordura Corporation) and subsequently was sold to System Development Corporation in 1974. AID's original founders repurchased the company in 1979.

 - In 1976 the same four principals founded First Computer Corporation, a DEC OEM, systems integrator, and distributor headquartered in Westmont (IL). First Computer and AID currently operate as separate companies owned by the same stockholders.

- AID offers a broad range of professional services, software products, and customized turnkey systems to both cross-industry and industry-specific markets, with specialization in manufacturing, distribution, retail, insurance and Blue Cross/Blue Shield, and banking.

- INPUT estimates 1982 AID revenue at $16 million, a 15% increase from estimated revenue of $14 million in 1981. AID management states that the company has been profitable since inception.

- Competitors to AID in its professional services business include the Big 8 accounting firms, Computer Task Group, CGA Computer Associates, and DASD.

KEY PRODUCTS AND SERVICES

- INPUT estimates that 80% of AID's 1982 revenue was from professional services and 10% from software packages. The remaining 10% of revenue was from hardware product sales including an automated ink jet control system for the printing industry developed by AID's Digital Engineering Group.

- AID provides a wide variety of professional services including consulting, development and implementation services, a productivity improvement program, and mini/microcomputer services.

*INPUT estimate

©1983 by INPUT. Reproduction Prohibited.

- Consulting services consist of two basic categories:
 - Management consulting includes planning studies, data processing organizational and operations reviews, and systems/programming reviews.
 - Technical consulting involves hardware and software reviews and analyses, with expertise in mini/microcomputer selection and architecture, distributed data processing, data communications planning, data base design, and hardware operations.
- Systems development and implementation services include:
 - Total project management and systems development including planning, requirements analysis, systems design, programming, and installation.
 - Conversion capabilities based on AID's proprietary methodology tailored to clients' mainframe, language, operating system, and site conversion requirements.
 - Contract personnel provided for short-term or supplemental programming requirements.
- AID's Productivity Improvement Program provides a variety of unique quality assurance products and services designed to reduce development and maintenance costs.
 - A Quality Assurance Rating Index measures quality, timeliness, and costs at any point during a software development project.
 - Independent Software Test Teams prepare test cases, execute test runs, and supply problem reports for specific projects.
 - AID offers seminars and consulting services for project management and control, systems development methodologies, and determination of the focus and impact of the quality assurance effort on the client's data processing organization.
 - A set of coordinated handbooks and manuals addressing productivity improvement are available, including a Project Manager's Handbook, Testing Management Handbook, Project Progress Reporting System, Personnel Evaluation Package, and Program Design and COBOL Programming Guidelines.
- Mini/microcomputer services consist of:
 - AID's Digital Engineering Group, which provides a wide range of services related to mini/microcomputer data acquisition and control systems. Services supplied involve conceptual and

©1983 by INPUT. Reproduction Prohibited.

detailed design of real-time systems including hardware selection, systems and applications software development, and complete system integration and testing.

- Customized turnkey systems services including engineering of boards, controllers, computers, and software to meet special application needs, on either a prototyping or production basis.

- Representative examples of AID professional services assignments include:
 - Management consulting: providing an assessment to client management on a $35 million development project with emphasis on the anticipated time and cost to complete.
 - Technical consulting: performance of a tuning analysis of MVS and IMS systems for a major IMS DB/DC planned application that resulted in deferring the need for additional hardware.
 - System development: complete management and development of a sophisticated order entry system that resulted in a significant clerical force reduction and allowed the client to handle large increases in its business without additional order entry personnel.
 - Conversions: for one client, converting over 20 divisions to a centralized computer system.
 - Contract programming: staffing for a client's temporary needs, AID provided over 50 people for varying lengths of time, allowing the client to complete a major effort without adding permanent staff.
 - Productivity Improvement Program: to meet the strict controls required in a major financial institution, AID provided an independent test team to perform testing for a key new system.
 - Micro engineering: AID designed, engineered, prototyped, programmed, developed, and produced a network of microcomputer-based remote air quality monitoring systems connected to a centralized minicomputer for an environmental protection agency.
- AID currently offers three software packages.
 - AID-MCS® is a manufacturing control system introduced in 1978. A Basic Edit/Reporting System operates with AID-MCS's five optional subsystems, which include Distribution Requirements Planning, Master Production Scheduling, Material Requirements Planning, Resource Requirements Planning, and Capacity Requirements Planning.

©1983 by INPUT. Reproduction Prohibited.

. A chart of AID-MCS license fees follows. AID installation fees include certain software customization services.

AID-MCS Subsystems	Installed By: Client	AID
Basic Edit/Reporting	$20,000	$40,000
Materials Planning Subsystems (DRP-MPS-MRP)		
First Subsystem	$20,000	$40,000
Second Subsystem	$15,000	$30,000
Third Subsystem	$10,000	$25,000
Capacity Planning Subsystems (RRP-CRP)		
First Subsystem	$20,000	$35,000
Second Subsystem	No Charge	$30,000

. AID-MCS runs on IBM 360, 370, 303X, 4300, and compatible mainframes under VM, MVS, OS, and DOS. There are over 25 installations of the product.

- AID introduced JCLWTR, an IBM JCL SYSOUT storage and retrieval system, in April 1983. JCLWTR coordinates and simplifies on-line and computer output microfilm (COM) access to JCL listings for MVS production jobs.

 . Features include elimination of printing, bursting and filing of production JCL listings, a master index accessible through the TSO/system productivity facility, and support for Datagraphix's MICROCOM and Kodak's KOMSTAR COM interfaces.

 . JCLWTR is available for a one-time license fee of $7,500.

 . The system runs on IBM and compatible mainframes under MVS.

- In mid-1982 AID introduced the Paperless Claims Entry System, an on-line health claims data entry package for Blue Cross/Blue Shield organizations.

INDUSTRY MARKETS

- AID clients include Fortune 1000 and smaller firms in all industry sectors. Industries served include manufacturing, distribution, retail, banking, brokerage, insurance, utilities, communications, publishing, printing, transportation, government, and associations.

©1983 by INPUT. Reproduction Prohibited.

GEOGRAPHIC MARKETS

- One hundred percent of AID's 1982 revenue was derived from across the U.S., primarily from the Midwest.
- Branch offices are located in Milwaukee, Minneapolis/St. Paul, Westport (serving New York City and New Jersey) and Hartford (CT), Seattle, St. Louis, Denver, and Phoenix.

COMPUTER HARDWARE AND SOFTWARE

- AID maintains two DEC PDP-11s at its Oak Brook headquarters for internal use.

©1983 by INPUT. Reproduction Prohibited.

APPLIED LEARNING INTERNATIONAL, INC.
1751 West Diehl Road
Naperville, IL 60540-9075
(312) 369-3000

H. David Bright, Acting President and CEO
Subsidiary of National Education Corporation
Total Employees: 1,300
Total Revenue, Fiscal Year End 12/31/87: $180,000,000*

*INPUT estimate

The Company

Applied Learning International, Inc. (ALI), a subsidiary of National Education Corporation (NEC), considers itself to be the largest dedicated education and training provider for information processing, technology management, end-user computing, and human resource development topics to industry and government markets. ALI's training delivery modes include interactive video instruction, computer-based training, instructor-led, and linear video instruction.

- ALI was formed in December 1987 with the merger of the DELTAK Training Corporation and Advanced Systems, Inc. The resultant company was renamed Applied Learning International.
 - DELTAK was acquired by NEC in May 1986.
 - Advanced Systems was acquired by NEC in December 1987 in a pooling-of-interests transaction. NEC exchanged 1.625 shares of its common stock for each share of Advanced Systems' common stock, for a total of approximately 9.5 million shares. Advanced Systems had revenue of about $83.5 million for calendar 1987.
- In October 1988, ALI announced the formation of the Management Skills Division. This new division will focus on providing training in management skills and other human resource topics.

The combined 1987 revenue of DELTAK and Advanced Systems, Inc. is estimated by INPUT to be approximately $180 million. ALI projects 1988 revenue will exceed $200 million.

Key Products and Services

ALI's library of over 7,000 course offerings cover a variety of product areas as illustrated in the following exhibit.

Copyright 1988 by INPUT. Reproduction Prohibited.

EXHIBIT

APPLIED LEARNING INTERNATIONAL
KEY PRODUCT AREAS

PRODUCT AREA	PRODUCT AREA
Information Processing Professional Skills - Entry Level and Programming - Systems Analysis and Design - MVS/SP/XA - VM - VSE - System/38 - System/36 - DEC - UNIX and "C" - Data Base and 4GL - DB2 and SQL - IMS - IDMS/R - Data Comm/Networks - CICS - VS1 - Hewlett Packard **Technology Management** - Technology Options - Business Impact/ Strategic Planning - Implementation - Managing the Environment - Security and Controls	**End User Computing** - Information Center Overview - Computer Literacy - Personal Computing - Mainframe Computing - Hardware-Specific Environments - Office Systems **Human Resource Development** - Management and Supervisory - Supervisory Skills - Project Management - Personal Skills - Sales/Marketing - Engineering Sciences **Manufacturing** - CIM - MRP II - Total Quality Commitment - Just-In-Time - People, Organization & Culture - Purchasing - Industrial Skills

Copyright 1988 by INPUT. Reproduction Prohibited.

Industry Markets

ALI derives 100% of revenue from training and education to cross-industry markets.

ALI serves more than 7,000 clients in business and government, including over 90% of the Fortune 500 companies.

Geographic Markets

Approximately 69% of ALI's 1987 revenue was derived from the U.S., 6% from Canada, and 25% from other international sources.

ALI operates 49 North American offices from its headquarters in Naperville, and 26 international offices from headquarters in London.

Production and distribution centers are located in Chicago, Toronto, Stockholm, London, Hong Kong, Tokyo, Dusseldorf, Amsterdam, Sidney, Manila, and New Delhi.

Computer Hardware

ALI has the following computers installed at its Naperville offices in support of course development:

- IBM 3081 Dual Processor.
- IBM microcomputers and compatibles.
- Zenith microcomputers.

Copyright 1988 by INPUT. Reproduction Prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

August 1996

Applix, Inc.

President & CEO: Jitendra S. Saxena
112 Turnpike Road
Westboro, MA 01581
Phone: (508) 870-0300
Fax: (508) 366-2278
Internet: http://www.applix.com



Status:	Public
Employees:	234 (12/95)
Revenue (FYE 12/31/95):	$32,340,000
Revenue: 6 months ended 6/30/96:	$22,903,000

Key Points

- Applix, Inc. develops, markets, and supports software tools and applications for enabling the Real Time Enterprise: those organizations that seek to gain competitive advantage by converting raw data into effective action in the shortest possible time.
- In June 1996, Applix announced the Applix Any*ware* family of products, the first commercial application solutions to leverage Java to develop and deploy interactive business applications to networked desktops.
- Also in June 1996, Applix announced Applix*ware* to FAME Link and Applix*ware* Real Time DDE Server and Applix*ware* Real Time Subscribe (RTS) to Microsoft Excel.
- In May 1996, Applix and Red Hat Software announced the availability of the Applix*ware* suite of products for the Red Hat LINUX operating system.
- In January 1996, Applix announced that Duetsche Bank was installing Applix Real Time Spreadsheets in its trading rooms worldwide.

© INPUT 1996 Reproduction prohibited

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

- In December 1995, Applix signed a total enterprise and integration agreement with Ericsson.

- In October 1995, Applix acquired Target Systems Corporation, a developer of support automation software.

Company Description

Founded in 1983, Applix is a worldwide provider of solutions for the Real Time Enterprise: those organizations that seek and gain competitive advantages by converting raw data into effective action in the shortest possible time.

- Real time enterprises access data from dynamic, continuous data streams, instantly analyze the options, make decisions, and communicate results.

- Applix markets its products as a set of enterprise tools for building real time-decision support applications and improving customer interaction capabilities.

- Applix's primary product software includes Applix*ware*, Applix Enterprise, and Applix Any*ware*.

Organization and Structure

Applix is headquartered in Westboro (MA) and maintains domestic sales offices in Dallas (TX), San Jose (CA), New York (NY), and Washington D.C.

The company also has a network of wholly owned international subsidiaries in France, Germany, the Netherlands, Canada, and the U.K.

Applix's key executives are listed below:

Applix, Inc. Key Executives

Name	Title
Jit Saxena	President & CEO
Richard Davis	EVP Sales & Marketing
Patrick Scannell, Jr.	VP Finace/Administration & CFO
Craig Cervo	VP Product Development
Barry Zane	VP Technology
James R. Murphy III	VP Technology, Applix Enterprise
V. Anthony Giannelli	VP Business Development & Marketing
Barry Burke	Director Strategic Product Planning

Financials

Applix's 1995 revenue reached $32.3 million, a 75% increase over 1994 revenue of $18.5 million. Net income was $0.6 million, compared to $1.4 million in 1994.

- Applix enjoyed growth in both sectors of its business during the 1995 fiscal year, but company financial results suffered an overall decline compared to fiscal 1994 because of a one-time $6.2 million charge resulting from the acquisition of Target Systems.

- A three-year financial summary follows:

© INPUT 1996 Reproduction prohibited.

Applix, Inc.
Three-Year Financial Summary
($ Millions, except per-share data)

Item	Fiscal Year 1995	1994	1993
Revenue	$32.3	$18.5	$9.5
• Percent change from previous year	75%	95%	N/A
Income (loss) before taxes	$0.6	$1.4	$(0.4)
• Percent change from previous year	(60%)	450%	N/A
Net income (loss)	$0.6	$1.4	$(0.4)
• Percent change from previous year	(a) (60%)	450%	N/A
Earnings (loss) per share	$0.07	$0.20	$(0.34)
• Percent change from previous year	(70%)	160%	N/A

(a) Includes a one-time charge of $6.2 million related to the Target Systems acquisition.

Revenue Analysis by Product/Service

Approximately 73% of Applix's 1995 revenue was derived from software licensing a 27% from support services.

In fiscal 1995, Applix experienced growth in both licensing and services.

- Domestic license revenue increased 54% to $13 million, compared to $7.1 million for the same period in 1994. This increase resulted primarily from sales generated from the financial services sector.
- Service revenue increased 149% to $8.7 million, due to increased maintenance revenue from Applix's growing customer base, and to the company's increased emphasis on selling training and consulting services.
- A three-year summary of source of revenue is shown below:

Applix, Inc.
Three-Year Source of Revenue Summary
($ Millions)

Product/Service	Fiscal Year 1995 Revenue $	1995 Percent of Total	1994 Revenue $	1994 Percent of Total	1993 Revenue $	1993 Percent of Total
Licensing	$23.7	73%	$15.0	81%	$10.4	86%
Services	8.7	27%	3.5	19%	1.7	14%
Total	$32.4	100%	$18.5	100%	$12.1	100%

© INPUT 1996 Reproduction prohibited.

Interim Results

Revenue for the six months ending June 30, 1996, was $22.9 million, a 72% increase over $13.3 million for the same period in 1995. Net income for the first six months of 1996 was approximately $3.8 million ($0.35 per share), a 71% increase.

Market Financials

Applix derives its revenue primarily from the financial services, manufacturing/engineering, and telecommunications industries, and the federal government

Geographic Markets

Approximately 55% of Applix's 1995 software license revenue was derived from North America and 45% from international sources.

A three-year geographic summary of source of license revenue follows:

Applix, Inc.
Three-Year Geographic Source of License Revenue Summary
($ Millions)

	Fiscal Year					
	1995		1994		1993	
Geographic Market	License Revenue $	Percent of Total	License Revenue $	Percent of Total	License Revenue $	Percent of Total
North America	$13.0	55%	$7.1	48%	$7.0	67%
International	10.7	45%	7.9	52%	3.4	33%
Total	$23.7	100%	$15.0	100%	$10.4	100%

Acquisitions

In October 1995, Applix acquired Target Systems Corporation, a Marlboro (MA)-based developer of support automation software, for approximately $6 million.

- Target Systems developed support automation software for help desks, customer service, and asset tracking applications.
- Its Target Enterprise product line is now the core of Applix's Enterprise products.

Divestitures

In December 1995, Applix announced a two-for-one split of the company's outstanding common stock. The split was effected in the form of a 100% stock dividend.

Employees

As of December 31, 1995, Applix had 234 employees, segmented as follows:

Marketing and sales	53
Customer support	39
Finance and administration	26
International subsidiaries	55
Other	61
	234

Key Products and Services

Applix products are geared toward providing solutions for organizations that seek and gain competitive advantage through converting

© INPUT 1996 Reproduction prohibited.

raw data into action in the shortest possible time.

Applix develops, markets, and supports real-time products, including the Applix*ware*, Applix Enterprise, and Applix Any*ware* family of products.

*Applix*ware

Applix*ware* for the Real Time Desk is an open suite of integrated personal desktop tools, developed for both UNIX and Windows NT, that enable individual users with time-critical and historical data needs to access, analyze, display, and communicate information from a universal desktop across heterogeneous client/server environments, including the Web. Applications in the Applix*ware* family product line include:

- Applix Real Time, a secure, high-performance gateway to accessing real-time data, can be used to link "live" data feeds to Applix spreadsheets with Real Time Desk. Real Time is priced at $1,995 per concurrent user, and is available in versions that integrate directly with the Reuters Triarch 2000, Teknektron TIB, Micrognosis MIPS, Market Vision Link System, Bridge Data Exchange, and Bloomberg data distribution systems.

- Applix Builder is a cross-platform development tool for building, deploying, and renewing scaleable, real-time decision support applications. Applications built with Applix Builder can access live information from any real-time data source available through Applix Real Time. Applix builder is priced at $2,495 per concurrent user.

- Applix Spreadsheets is a customizable, graphical spreadsheet that offers a full-function, 3-D analysis and modeling tool. Applix Spreadsheets supports "live links" to other Applix*ware* modules, including Applix Real Time and Applix Data. Priced at $695 per concurrent user, Applix Spreadsheets includes filters to support file interoperability and live links with Microsoft Excel and Lotus 1-2-3.

- Applix Words is a customizable, graphical word processor and desktop publisher that serves as the underlying framework for compound documents. Priced at $695 per concurrent user, Applix Words offers forms capability, information object embedding, live links with other Applix*ware* products, customer-developed applications, and third-party applications.

- Applix Graphics is a full-feature drawing, charting, and graphics editing package priced at $195 per concurrent user.

- Applix Presents is a full-featured, cross-platform UNIX and Microsoft Windows NT presentation environment. Priced at $495 per concurrent user, Applix Presents provides tools for the creation of presentations that can be authored and viewed on a variety of workstations, distributed directly on the network or linked to enterprise applications.

- Applix Data is an application that enables information stored in Oracle, Informix, Sybase, and CA-Ingres databases to be live-linked into other Applix*ware* applications. Priced at $995 per concurrent user, Applix Data allows users to graphically query, access, update, and share information.

- Applix Mail and OpenMail electronically send and receive both Applix*ware* documents and non-Applix files from the workgroup to locations around the world. Applix Mail can automatically filter Applix*ware* documents, spreadsheets, and graphics files into desired file formats

© INPUT 1996 Reproduction prohibited.

specified for each recipient. The price for Applix Mail and Applix Open Mail is $195 each per concurrent user.

- Applix HTML Author provides development of documents for the Internet or the Web. Retailing for $195 per concurrent user, Applix HTML Author can automatically convert existing Applix Words documents to HTML templates or map selected document styles to HTML.

Applix Enterprise

Applix Enterprise is an integrated set of support automation applications for handling the data needs of customer interaction environments.

Applix Enterprise software is designed to be compatible with leading packages for network management, automated asset collection, notification technologies, and E-mail.

Products in the Applix Enterprise line include:

- Applix HelpDesk, a graphical call tracking and inquiry management application designed for internal customer support operations through tailorable work flow and resolution technologies. Applix HelpDesk is priced at $1,095 per concurrent user.

- Applix Service is a graphical problem-management application designed for external customer support. Priced at $1,095 per concurrent user, Applix Service includes the ability to track multiple contacts per customer, Service Level Agreements, and Return Material Authorizations.

The Applix Enterprise product line also includes the following interfaces:

- Applix WebLink allows real-time access to an organization's support center to create a virtual service environment that meets customers' demands more effectively.

- Applix SupportLink gives customers direct computer access to an organization's support center to log, research, and resolve questions and problems on their own.

- Executive Information Center provides managers and executives with a concise understanding of an organization's operations.

- Applix LifeLine/HA guarantees the operation of an organization's support center even in the event of network or server failure.

- Applix Mobile allows information to be processed and updated without direct connection to the central database.

*Applix Any*ware

The Applix Any*ware* family of products is a commercial applications solution that utilizes Java™ technology to build and deploy interactive business applications to networked desktops. Products in the Applix Any*ware* product line include applications, server products, and tools.

Applications include the following:

- Applix Any*ware* WebSheet is an interactive, graphical, Webtop spreadsheet with the ability to access real-time and historical data from relational and multidimensional databases. Priced at $295 per concurrent user, WebSheet is fully compatible with Applix Spreadsheets, and can import and export Microsoft Excel and Lotus 1-2-3 spreadsheets.

© INPUT 1996 Reproduction prohibited.

Server products include the following:

- Applix Any*ware* Server is the base platform for all Any*ware* applications. At least one server per site is required, although multiple servers can be used to provide load balancing for large user communities and complex applications. Priced at $4,995 per concurrent user, Any*ware* Server components include:
 - Any*ware* Applications Server Software, which provides the platform to publish both content and interactive applications directly to Java-enabled platforms
 - Any*ware* HTTP Server Integration Software, which initially supports Netscape's family of UNIX-based HTTP servers via a shared NSAPI library
 - Any*ware* Server Configuration Templates and Tools provide utilities to install, maintain, and operate the Any*ware* server software.
 - Any*ware* Client Software includes all necessary Java class files and Any*ware* on-line documentation and help necessary for client access to the Any*ware* Server and all Any*ware* applications.
- An Applix Any*ware* WebData Gateway License is required, at $195 per concurrent user, for each user that requires access to an Any*ware*-supported SQL relational database.
- Applix Any*ware* WebRealTime Gateway is priced at $995 per concurrent user and is required for each concurrent user that requires real-time data.

Tools include the following:

- Applix Any*ware* Innovators Workbench provides a suite of application development tools and utilities required for building and deploying custom solutions with Applix Any*ware*. A single license is required for each concurrent Any*ware* developer, at $2,495 each.
- Applix Any*ware* WebSheet Innovators Extension to the Innovators Workbench adds the ability to create custom spreadsheet-based applications, including embedded graphics, buttons, and macros. This product is licensed at $695 per concurrent user.
- Applix Any*ware* WebRealTime Innovators Extension is for developers creating RealTime applications and, with the base Innovators Workbench or used with the Any*ware* WebSheet, provides access to any supported RealTime Gateway for development and testing. This product is licensed at $1,995 per concurrent developer.
- The Applix Any*ware* WebSheet Starter Kit contains the Applix Any*ware Server*, a single license for the Applix Any*ware* Innovators Workbench and the Applix Any*ware* WebSheet Innovators Extension, and ten concurrent user licenses for the Applix Any*ware* WebSheet and Applix Any*ware* WebData. This Starter Kit is priced at $995.

Clients

A sample of Applix's customers include Motorola, NASD, Panasonic, Societe Generale, The Swiss Bank Corp., Bank of Boston, and First Union National Bank.

Additionally, Applix recently reached two agreements with major clients:

© INPUT 1996 Reproduction prohibited.

- Ericsson signed a total enterprise and integration agreement with Applix under which all components of Applix*ware* and Applix Builder will be made available to Ericsson employees and customers.

- Deutsche Bank AG is installing Applix Real Time Spreadsheets on its IBM RS/6000 workstations worldwide.

Marketing and Sales

Applix has historically focused its marketing efforts on four industry sectors: financial services, manufacturing/engineering, telecommunications, and the federal government, because these markets require prevalent use of 32-bit open computer systems (UNIX and NT workstations and servers) and depend on information analysis and dissemination.

Applix markets its products in North America primarily through a direct sales force. Additionally, the company's sales force works on occasion with strategic marketing partners and resellers.

Alliances

Applix has strategic marketing relationships with leading vendors and systems integrators within targeted industry sectors.

A sample of Applix's partnerships include Dow Jones Telerate, Allen-Bradley, Market Vision, Reuters, TIBCO, and Westinghouse.

Applix also has strategic relationships with a number of companies including Bloomberg, Digital Equipment Corporation, Hewlett-Packard, IBM, Informix Software, Netscape Communications, Oracle, Silicon Graphics, Sun Microsystems, and Sybase.

Additional strategic relationships and alliances include:

- Red Hat Software and Applix have an agreement under which Red Hat bundles Applix*ware* 4.2 with the commercially available version 3.03 of Red Hat LINUX.

- The Math Works, Inc. and Applix have an agreement under which the companies will co-market Applix Link, an interface between their respective MATLAB and Applix*ware* products.

- Applix and FAME have a cooperative marketing agreement that includes joint promotion, seminars, and a sales incentive program.

- Applix has a strategic relationship with Benton Associates, a consulting firm based in Toronto, to provide customers with consultation in the use of Applix*ware* technology and FAME time series data.

Competition

Applix faces competition from various sources with respect to each of the individual applications included in Applix*ware*.

Applix Real Time competes with Lotus Realtime and WingZ RealTime. The other Applix*ware* applications compete primarily with office automation and data access products offered by companies such as Novell, Microsoft, Lotus, Clarity, Frame, Oracle, and Sybase.

Applix Enterprise products compete primarily with products from Remedy, Clarify, Scopus, and Astea.

Applix Any*ware* products compete with applications developed in-house.

© INPUT 1996 Reproduction prohibited.

INPUT Assessment

Applix's strengths include:

- Comprehensive product offerings
- The extensive use of company products by major financial and governmental institutions
- Leadership in the evolving real-time information processing market
- Applix Any*ware*'s Java™ foundation
- Access to a range of data services, relational real-time, and historical data
- Full cross-platform compatibility
- Multilingual product support

Challenges for the future include:

- Competition from established industry players (Microsoft, Novell, Oracle, Sybase)
- Integrating and expanding the Applix Enterprise product line
- Maintaining an innovative position in a rapidly changing and immature market

© INPUT 1996 Reproduction prohibited.

ARBITRON COMPANY (THE)
142 West 57th Street
New York, NY 10019-3301
(212) 887-1314

Anthony J. Aurichio, President
Wholly Owned Subsidiary of Control Data Corporation
Total Employees: 2,446 (8/89)
Total Revenue, Fiscal Year End 12/31/88: $320,000,000*

*INPUT estimate

The Company

The Arbitron Company is the largest local-market audience measurement service in the country and is the only one to monitor both television and radio audiences. Arbitron's ratings information is used by advertisers and broadcasters as the basis for buying and selling radio and television time.

Arbitron operates as a wholly owned subsidiary of Control Data Corporation (CDC) within CDC's Information Services Group.

Arbitron's business was expanded during 1986 and 1987 with the following acquisitions:

- In December 1986, CDC purchased Broadcast Advertisers Reports, Inc. (BAR) and its wholly owned subsidiary, Radio/TV Reports, Inc. (RTV) for $58.5 million.
 - BAR monitors television and radio commercials and compiles advertising rate information. RTV provides photo boards and television and radio transcripts for the advertising and public relations industries.
 - The operations of BAR have been merged into Arbitron.
 - RTV operates as a separate division of Arbitron.
- In December 1987, CDC purchased SAMI/Burke, Inc., a market research firm that tracks product purchases, from TIME Incorporated for $60 million in cash plus future payments based on SAMI/Burke revenue growth during the years 1991 through 1994.
 - SAMI/Burke had approximately 2,700 (including 1,000 part-time) employees at the time of the acquisition.

Copyright 1989 by INPUT. Reproduction Prohibited.

- The operations of SAMI have been merged into Arbitron. CDC sold the Burke custom research business to Burke's managers in July 1989.

Arbitron's principal competitor is A.C. Neilsen Company.

Key Products and Services

Arbitron's audience measurement services help broadcasters determine which shows attract the largest audiences, so advertisers may select where to place their advertisements.

- Arbitron's Local Market Television Service provides audience estimates (television ratings) for all broadcast stations in 212 markets across the U.S. The service collects information through a people meter in one market (Denver), household meters and diaries (which collect demographic information) in 13 markets (New York, Los Angeles, Chicago, Miami, Detroit, San Francisco, Cleveland, Dallas/Ft. Worth, Houston, Boston, Washington, D.C., Atlanta, and Philadelphia), and diaries in 198 markets.

- Arbitron's Local Market Radio Service provides audience radio ratings for 260 local markets using diaries.

- Audience measurement services are provided to more than 6,000 clients.

- Arbitron operates a data center in Beltsville (MD) that collects, analyzes, and prepares reports on the viewing and listening habits of the general public.

ScanAmerica, Arbitron's National Television Service, uses an electronic meter to track television viewing by individuals and a Universal Product Code (UPC) scanner to collect product-purchase data from households.

- The ScanAmerica electronic meter monitors television viewing in detail: the age and sex of everyone watching; the channel, broadcast, or cable being watched; the exact time and length of viewing; and the use of VCRs with television sets.

- ScanAmerica uses a portable in-home scanner wand to track products brought into the household by recording the products' UPCs. The television viewing and product information is stored by the meter, transferred to the main computers for processing, and used to produce reports for advertisers and broadcasters.

Copyright 1989 by INPUT. Reproduction Prohibited.

- ScanAmerica has been operating successfully in Denver since April 1987 and will begin operating a nationwide network service in 1989. Plans call for 200 homes in each of five markets to be wired initially. More homes will be added across the U.S. in 1990 to total 2,600 homes. The final sample will encompass 5,000 homes in 1992.

Through its Broadcast Advertisers Reports (BAR) business, Arbitron monitors and produces detail and expenditure reports for where and when commercials are run on television, cable, and radio networks, and then sells this information to advertisers and their agencies. BAR also monitors commercials in 75 of the 212 spot television markets.

SAMI measures product performance for packaged goods advertisers. This Arbitron service monitors retail sales (by way of store scanners) and shipments to stores (through warehouse withdrawals).

- Warehouse withdrawals of brands and categories are available for both food (supermarkets and grocery stores) and drug stores in 54 markets. Both services provide a virtual census of packaged goods arriving at retail outlets from retail and wholesale warehouses.

- SAMSCAN, a scanner tracking service, monitors the retail sales of products through a scanner sample of 2,40 stores in 35 markets. SAMSCAN also tracks coupons, free-standing inserts, and in-store displays.

Arbitron annually publishes over 120 million television report pages, 1.7 million weekly/monthly television market reports, over 5,000 daily meter reports, over 105 million radio report pages, over 500,000 radio market reports, 7.5 million SAMI report pages, and over 475,000 SAMI market reports.

Arbitron also offers the following application tools to provide marketers, retailers, agencies, and broadcasters with direct access to all the data it collects.

- DecisionMaster is an optical-disk-based product for microcomputers that allows the user to review, select, and analyze product tracking data.

- TradeMaster is the retailer participant version of DecisionMaster.

Copyright 1989 by INPUT. Reproduction Prohibited.

- BrandTraQ is a microcomputer-based software product that automatically computes rating point deliveries for category and brand television advertising schedules.
- AdSpender, a joint venture between Arbitron and Leading National Advertisers, is a microcomputer-based application that delivers competitive advertising expenditures for all major media--including television, radio, newspapers, and magazines.
- Arbitron Information on Demand gives marketers direct access to all the television and radio audience information collected by Arbitron.

Industry Markets

Arbitron's revenue is derived from advertisers, broadcasters, and the manufacturing and distribution industries.

Arbitron's clients currently include 650 television stations, 1,824 radio stations, 1,974 television advertisers and agencies, and 3,500 radio advertisers and agencies. In addition, SAMI clients include 390 consumer packaged-goods manufacturers.

Geographic Markets

One hundred percent of Arbitron's revenue is derived from the U.S.

Arbitron has 41 offices across the U.S.

Computer Hardware

Arbitron has one IBM 3090, four CYBER 760s, and nine Data General systems installed in Beltsville (MD).

Scan America and BAR use the computers installed in Beltsville.

SAMI uses two IBM 3090s and two IBM 3084s located at a data center in Chicago.

Copyright 1989 by INPUT. Reproduction Prohibited.

INPUT

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

February 1996

Arkansas Systems, Inc.

Chairman: Dr. James K. Hendren
President & CEO: Donald B. Hatfield
8901 Kanis Road
Little Rock, AR 72205
Phone: (501) 227-8471
Fax: (501) 227-5436

ARKANSAS SYSTEMS

Status:	Private
Employees:	130 (2/96)
Revenue:	$12,000,000*
Fiscal Year End:	12/31/95

** INPUT estimate*

Key Points

- Arkansas Systems, Inc. offers software products for the midrange and PC-LAN computer market.
- Over the past several years, Arkansas Systems has increased its focus on payment and financial transaction delivery systems to the retail banking and finance industry.
- A strong area of business growth has been the international market. Approximately 60% of revenue is now derived from international sources.
- In January 1996, Arkansas Systems announced that Donald B. Hatfield, a former executive of ALLTEL Information Services, had been named president and CEO. Dr. James K. Hendren, formerly president of Arkansas System, has become chairman of the board and continues his management capacity as senior vice president and chief administrative officer.
- In 1995, Arkansas Systems released its Integrated Debit Card System (IDCS) that allows financial institutions to issue and process MasterCard, VISA or private label debit cards.
- Arkansas Systems also announced the release of Flexi-Check II and Flexi-Remittance II—image solutions for the company's item processing systems.

© INPUT 1996. Reproduction prohibited.

All brand names and product names are acknowledged to be trademarks or registered trademarks of their owners.

Company Description

Arkansas Systems, incorporated in 1975, provides software products and professional services for IBM midrange and PC-LAN systems. Products are currently provided primarily to the retail banking, finance and payment systems industries.

Arkansas Systems currently has experience with approximately 1,400 customers in 63 countries worldwide.

Company Strategy

Arkansas Systems' strategy is to market and support electronic banking products, including electronic funds transfer (EFT) and automated teller machine (ATM) and item processing products for midrange and PC-LAN systems. Arkansas Systems is taking advantage of the growing use of IBM AS/400 and PC-LAN systems in the finance market to get distributed systems out quickly to financial institutions and enterprises of all sizes.

Arkansas Systems is pursuing business worldwide, serving banks from Asia, Europe, Latin America, the Caribbean and the U.S.

Arkansas Systems is developing new technologies in the areas of networking, image-based processing, fax integration, home banking, smart cards and electronic bill payment.

Financials

INPUT estimates Arkansas Systems' 1995 revenue approximated $12 million, up 20% over 1994 revenue. A five-year revenue summary follows:

Arkansas Systems, Inc.
Five-Year Revenue Summary *
($ Millions)

	Fiscal Year				
Item	1995	1994	1993	1992	1991
Revenue	$12.0	$10.0	$8.4	$7.8	$6.5
• Percent change from previous year	20%	19%	8%	20%	--

* *INPUT estimates.*

Market Financials

Arkansas Systems derived approximately 95% of its 1995 revenue from the banking and finance industry and 5% from state and local government.

Geographic Markets

Approximately 40% of Arkansas Systems' 1995 revenue was derived from the U.S. and 60% was derived from international sources.

Arkansas Systems' U.S. office is in Little Rock. In late 1995, the company began construction of a new corporate facility in west Little Rock, scheduled for completion in late 1996. The company also has offices in Budapest (Hungary) and Moscow (Russia).

Outside the U.S., Arkansas Systems has clients in 63 countries throughout Central and South America, the Caribbean, Eastern Europe, Asia, the Middle East and the Asia/Pacific.

© INPUT 1996. Reproduction prohibited.

Acquisitions

In mid-1994, Arkansas Systems acquired VICAPS (Visa International Card Authorizing and Processing System)—the largest IBM AS/400-based credit card issuing and processing package—from Visa. The product has been renamed ICCS (Integrated Credit Card System) and is integrated into the company's other products.

Employees

Arkansas Systems currently has 130 employees, segmented as follows:

Marketing and sales	20
Technical	80
General and administrative	20
Other	10
	130

Key Products and Services

Arkansas Systems provides solutions to improve the effectiveness of payment and financial transaction delivery systems worldwide.

In 1991, the company re-engineered its software offerings creating a unified suite of products known as Integrated Transaction Management (ITM) solutions.

- The ITM concept provides additional functionality by offering financial institutions the ability to combine and integrate numerous payment and financial transaction delivery systems.
- Other software offered with the ITM suite includes ATM Management, POS Management, Teller Terminal Management, Integrated Credit Card System, Integrated Debit Card System, item processing applications, remittance processing applications, clearinghouse applications, EFT network solutions and communications applications.
- The products support AS/400 and PC-LAN platforms.
- Product pricing depends on the IBM host, type and model, protocol requirements and device or network selected.

Arkansas Systems' products are summarized in the exhibit on the following page and include the following:

- ITM/PC, the PC-LAN version of ITM, is a multitasking solution that provides a graphical user interface (GUI). It is open-ended and interfaces with most operating platforms and other core accounting software.
- ATM Management supports communications between a S/3X, AS/400 or PS/2 and any type of ATM terminal in both proprietary and shared networks.
- Integrated Bill Payment System allows an institution's customers to pay bills and perform other banking transactions or inquiries from a touch-tone telephone or ATM.
- The Batch EFT Network Connection System provides periodic batch communications with the institution's chosen EFT network. The institution's host computer receives periodic ATM transactions from the EFT network.
- The Online EFT Network Connection System is a client/server solution that provides continuous communication between the financial institution and the EFT network for real-time transaction authorization or denial.

© INPUT 1996. Reproduction prohibited.

Exhibit

Arkansas Systems Software Products

Product	Year Introduced	Number Installed	Pricing
ATM Management System	1981	+550	$20,000 - $50,000
POS Management System	1991	+10	(a)
Banking Customer Information System	1981	20	$6,500
Intercept Processing System	1982	+72	(a)
MICR/Proof Interface	1984	50	$7,000 - $15,500
Teller Terminal Management System	1982	125	$12,500 - $75,000
Flexi-Net	1988	15	(a)
Flexi-Check	1988	+75	$13,000 - $90,000
Flexi-Check II	1995	New	(a)
Flexi-Lockbox	1990	+10	(a)
Flexi-Remittance	1989	10	(a)
Flexi-Remittance II	1995	New	(a)
Tele-Banking System	1988	30	$14,500 - $45,000
Integrated Transaction Management	1991	+80	$30,000 - $500,000
Integrated Credit Card System	1994	+40	(a)
Integrated Debit Card System	1995	+5	(a)
Integrated Bill Payment System	1994	5	(a)
Client ACCESS Solutions	1995	New	(a)
Clearinghouse System	1994	7	(a)
Image Signature Verification	1995	New	(a)
Multi-bank Shared EFT Network	1989	15	$55,000 - $500,000
Batch or Online EFT Network Switch Interface System	1982	450	(a)
DES-Mate External Encryption Device	1988	50	(a)
Enhanced Problem Annunciator Product	1989	+30	(a)
PATH Communication Controllers	1985	400	$6,000 - $10,000

(a) Pricing available on request.

© INPUT 1996. Reproduction prohibited.

- The Intercept Processing System allows a financial institution to handle its own cardholder's transactions from its ATMs without accessing an external EFT network. An on-line link is provided to route foreign cardholder transactions at the host institution's ATMs to the EFT network.

- Tele-ACCESS provides an institution's customers with 24-hour, seven-day-a-week access to banking services via a touch-tone telephone or rotary dial telephone.

- The Flexi-Check System is a check processing system with modules that can be separately authored to fit specific processing requirements.

- Flexi-Remittance System is designed to process remittance payment documents with high-speed reader-sorters such as IBM's 389X/XP document processor family operating on-line to an AS/400 processor, either standalone or linked to IBM mainframes.

- Flexi-Check II and Flexi-Remittance II are image-oriented solutions designed to overcome the limitations of physical document processing by substituting digital images in the first steps of the handling process.

- Automated Communications Manager (ACM) allows institutions to automatically deliver and receive data files through IBM AS/400 communications, thus allowing an institution the opportunity of having a "lights out" operator. ACM allows users to schedule jobs to automatically send or receive data files.

- DES-Mate External Encryption Device provides financial institutions with protection of both PINs and network encryption keys from unauthorized disclosure. DES-Mate also provides EFT security by performing cryptographic processing and key management independently from the host computer.

- Enhanced Problem Annunciator (EPA) is an intelligent autodialer programmed to report error conditions associated with an Arkansas Systems' product, or any other application software, to designated personnel at primary and alternate locations, in a specified sequence within time-defined parameters.

- Integrated Credit Card System enables financial institutions to issue VISA, MasterCard or private label credit cards. The system runs on an IBM AS/400 and provides processing support for proprietary credit cards, multiple card organizations, multiple participants, multiple languages and multiple currencies.

- Integrated Debit Card System allows institutions to issue proprietary ATM and POS debit cards. The system provides card information including demographics, separate ATM and POS limits and other key status elements.

- EFT Network Solutions are a set of products to support local, regional and national EFT networks. Each product has specific features to support different EFT networks.

- Flexi-Lockbox System receives data read by PS/2 workstations. Both MICR encoded checks and remittance documents are captured and stored in an all items file. The captured items are recapped, summarized on reports and reformatted to standard ACH format for dissemination to lockbox customers via diskette, cartridge

© INPUT 1996. Reproduction prohibited.

tape, facsimile transmission or electronic transmission.

- Paths-Protocol Convertors—Arkansas Systems offers more than 25 PC-based protocol converters, or Paths, enabling AS/400 midrange systems to be used in multiple environments.

- POS Management System supports data communications with networked POS terminals to route and authorize credit and debit transactions.

- Teller Terminal Management System provides on-line communication between a host system and teller terminals to access current account data for transaction authorizations and to update account data as transactions occur.

- Integrated Transaction Management is an expandable solution for the IBM A/400 that manages EFT network solutions, items processing and clearing solutions, retail delivery and card-based payment solutions.

- Client-ACCESS Solutions enable financial institutions' customers to access multiple business transactions through a personal computer. Functions include balance access, current financial position, check clearing information, initiating transactions and sending messages to the institution.

- Integrated Balance System is a basic accounting system for clients who do not have another accounting system for handling EFT transactions.

- Integrated Smart Card System is an expandable payment system solution designed to support the user, the acquirer, the merchant, the equipment owner/operator and other card programs.

- Integrated Merchant System provides the merchant portion of processing POS debit and credit transactions.

- Clearinghouse System supports all types of transaction processing, balancing, reporting, settlements between accounts and multi-institutions, as well as EFT networks.

Support Services

Arkansas Systems' Continuing Support and Warranty Extension (CS &WE) program provides unlimited telephone assistance to enrolled clients. Assistance is offered over the phone through customer service representatives or through on-line diagnostics (dial-up error diagnostics). Support is available 24 hours a day, seven days a week.

CS &WE clients receive an extended warranty on the Arkansas Systems' software and regular product upgrade release. This agreement is valid as long as the CS & WE fee is paid.

Arkansas Systems also provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing.

Clients

Recently announced U. S. clients include Ohio Bank, Farmers and Merchants Bank (NC), New England IBM Employee's Federal Credit Union and Central Corporate Credit Union (MI).

International clients include Far East Bank and Trust (Philippines), MEZOBANK (Hungary), the Agricultural Bank of

© INPUT 1996. Reproduction prohibited.

Lithuania, The Romanian Commercial Bank, Republic Bank Limited (Trinidad) and Central Bank of Russia.

Marketing and Sales

Arkansas Systems markets its products through direct sales, joint marketing agreements and an expanding distributor network.

Arkansas has an international network of distributors.

Alliances

Arkansas Systems has business partnership agreements with IBM, InterBold and NCR (AT&T GIS). The company also has strategic agreements with several software vendors.

Arkansas Systems is a National Solutions Provider and International Business Partner for IBM.

INPUT Assessment

Arkansas Systems considers itself an industry leader in the payment systems arena.

- The company is committed to providing products that position institutions for growth and will service the future needs of its customers.
- New technologies and methodologies in the payment industry are continuously added to the products.
- The company's latest growth can be linked into an increasing international presence.

A key challenge for Arkansas Systems is addressing the client/server arena as it relates to the financial services industry.

© INPUT 1996. Reproduction prohibited.

Vendor Profile

A Publication from INPUT's Vendor Analysis Program – U.S.

February 1995

Arkansas Systems, Inc.

President: Dr. James K. Hendren
8901 Kanis Road
Little Rock, AR 72205
Phone: (501) 227-8471
Fax: (501) 227-5436

Status:	Private
Employees:	120 (2/95)
Revenue:	$9,950,000
Fiscal Year End:	12/31/94

Key Points

- Arkansas Systems, Inc. offers software products for the midrange computer market.
- Over the past several years, Arkansas Systems has increased its focus on payment and financial transaction delivery systems to the banking and finance industry.
- A strong area of business growth has been the international market. Approximately 50% of new business is international.
- During 1994, Arkansas Systems released its Cash Management System that allows financial institutions to offer its commercial customers the ability to access their banking accounts via a personal computer.
- During 1994, Arkansas Systems also released a Bill Payment System that allows a financial institution's customers to pay bills and perform other banking transactions and inquiries by various mediums such as touch-tone telephone, personal computer or ATM.
- In mid-1994, Arkansas Systems acquired VICAPS (Visa International Card Authorizing and Processing System)—the largest IBM AS/400-based credit card issuing and processing package—from Visa. The product has been renamed ICCS (Integrated Credit Card System) and is being integrated into the company's other products.

© INPUT 1995. Reproduction prohibited.

Company Description

Arkansas Systems, incorporated in 1975, provides software products and professional services for the IBM midrange systems. Products are currently provided primarily to the banking and finance industry.

Arkansas Systems currently has approximately 1,300 customers in 58 countries worldwide.

Company Strategy

Arkansas Systems' strategy is to market and support electronic banking products, including EFT and ATM products for midrange systems. Arkansas Systems is taking advantage of the growing use of IBM AS/400 and PC-LAN systems in the finance market to get distributed systems out quickly to bigger banks.

Arkansas Systems is pursuing business worldwide, serving banks from Asia, Europe, Latin America as well as the U.S.

Arkansas Systems is developing new technologies in the areas of networking, image-based processing, fax integration and electronic bill payment.

Financials

Arkansas Systems' 1994 revenue reached $9.95 million, a 19% increase over 1993 revenue of $8.4 million. A five-year revenue summary follows:

Arkansas Systems, Inc.
Five-Year Revenue Summary
($ Millions)

	Fiscal Year				
Item	1994	1993	1992	1991	1990
Revenue	$9.95	$8.4	$7.8	$6.5	$6.5
• Percent change from previous year	19%	8%	20%	--	11%

Market Financials

Arkansas Systems derived approximately 95% of its 1994 revenue from the banking and finance industry and 5% from state and local government.

Geographic Markets

Approximately 55% of Arkansas Systems' 1994 revenue was derived from the U.S. and 45% was derived from international sources.

Arkansas Systems' only U.S. office is in Little Rock.

Outside the U.S., Arkansas Systems has clients in 58 countries.

Employees

Arkansas Systems currently has 120 employees, segmented as follows:

Marketing and sales	17
Technical	81
General and administrative	22
	120

© INPUT 1995. Reproduction prohibited.

Key Products and Services

Arkansas Systems provides solutions to improve the effectiveness of payment and financial transaction delivery systems worldwide.

In 1991, the company re-engineered its software offerings creating a unified family of products known as Integrated Transaction Management (ITM) solutions.

- The ITM concept provides additional functionality by offering financial institutions the ability to combine and integrate numerous payment and financial transaction delivery systems.
- Other software offered with the ITM suite includes ATM Management, POS Management, Teller Terminal Management, Integrated Credit Card Systems, Integrated Debit Card Systems, item processing applications, remittance processing applications, clearinghouse applications, EFT network solutions and communications applications.
- The products support AS/400 and PC LAN platforms. Certain products are also available for IBM System 36 and/or 370 architectures.
- Product pricing depends on the IBM host, type and model, protocol requirements and device or network selected.
- Arkansas Systems' products are summarized in the exhibit.

New products include the following:

- PC Online Teller allows users to customize their teller transaction set. This system is designed to interface with Arkansas Systems' Teller Terminal Management System.
- Integrated Credit Card System enables financial institutions to issue VISA, MasterCard, EuroCard, EuroPay and private label credit cards. The system provides back office processing and supports processing for multiple organizations.
- Integrated Bill Payment System allows an institution's customers to pay bills and perform other banking transactions or inquiries from a touch-tone telephone, personal computer or ATM.
- Commercial Cash Management System enables financial institutions to offer commercial customers access to their accounts via a personal computer.
- Clearinghouse System supports all types of transaction processing, balancing, reporting, settlements between accounts and multi-institutions, as well as EFT networks.
- Image Signature Verification uses state-of-the-art image technology to check signature verification.

Other banking products include the following:

- ATM Management System supports communications between a S/3X, AS/400 or PS/2 and any type of ATM terminal required by a financial institution in both proprietary and shared networks.
- Intercept Processing System provides local control of ATMs or PBMs by the financial institution.

© INPUT 1995. Reproduction prohibited.

Exhibit

Arkansas Systems Software Products

Product	Year Introduced	Number Installed	Pricing
ATM Management System	1981	550	$20,000 - $50,000
POS Management System	1991	+10	(a)
Banking Customer Information System	1981	20	$6,500
Intercept Processing System	1982	+72	(a)
MICR/Proof Interface	1984	50	$7,000 - $15,500
Teller Terminal Management System	1982	125	$12,500 - $75,000
PC Online Teller	1994	New	(a)
Flexi-Net	1988	15	(a)
Flexi-Check	1988	75	$13,000 - $90,000
Flexi-Node	1988	10	(a)
Flexi-Lockbox	1990	+10	(a)
Flexi-Remittance	1989	10	(a)
Telephone and Business Banking System	1988	30	$14,500 - $45,000
Integrated Transaction Manager	1991	80	$30,000 - $500,000
Integrated Credit Card System	1994	+40	(a)
Integrated Bill Payment System	1994	5	(a)
Commercial Cash Management	1994	New	(a)
Clearinghouse System	1994	7	(a)
Image Signature Verification	1995	New	(a)
Multi-bank Shared EFT Network	1989	15	$55,000 - $500,000
Batch or Online EFT Network Switch Interface System	1982	450	(a)
DES-Mate External Encryption Device	1988	50	(a)
Enhanced Problem Annunciator Product	1989	+30	(a)
PATH Communication Controllers	1985	400	$6,000 - $10,000

(a) Pricing available on request.

© INPUT 1995. Reproduction prohibited.

- POS Management System supports data communications with networked POS terminals to route and authorize credit card transactions.

- Flexi-Net offers communication and application support for networking one or more types of ATM and/or POS devices together with multiple EFT networks. Flexi-Net performs all required transaction switching and reformatting and presents the host with a single communications protocol and transaction image. The system allows an IBM S/3X, AS/400, S/370 or PC LAN machine to serve as a front end or distributed network node in a larger network.

- Flexi-Check offers support for selected check applications, data capture and processing, cycle sort and exception-item pull, on-line fine sort, extensive account analysis and account reconciliation.

- Flexi-Remittance is a full-featured remittance processing system for IBM's family of high-speed 389X-XP Document Processors and AS/400 architecture. The system supports a variety of processing workflows and item volumes. Features include high-speed, single-pass OCR/MICR item capture, endorsement, microfilming, on-line indexing, sorting, power encoding, on-screen and hard-copy reporting, cash letter generation and image capability.

- Flexi-Lockbox receives data read by a PS/2 workstation. Both MICR encoded checks and remittance documents are captured and stored in an all items file. The captured items are recapped, summarized on reports and reformatted to standard ACH format for dissemination to lockbox customers via diskette, cartridge tape, facsimile transmission or electronic transmission.

- Telephone and Business Banking System offers complete communication and application support for an on-line touch-tone phone and asynchronous terminal inquiry and transaction origination system. It provides customers with 24-hour access to account balances and selected other information via any touch-tone telephone. The system can support up to eight separate telephone lines per module and can control several calls independently. The system runs on IBM AS/400, S/34/36/38, 9370, 43XX and 370 architecture processors.

- The Teller Terminal Management System provides on-line communications between an IBM system and teller terminals in order to use current account data for transaction authorizations and to update account data on transactions that take place.

- Integrated Transaction Management provides integrated support for customers, network connections, self-service and attended devices. The system, which runs on an IBM AS/400, supports ATM, POS, Teller, Voice, PC, FAX, check equipment and debit and credit networks. This single unified system provides transaction authorization, bill payment and access to information by any method selected. The different modules interact extensively, providing enhanced customer service.

- Multi-bank Shared EFT Network is a set of products designed to support local, regional, national and international EFT networks.

- PATH communications controllers allow S/36 and AS/400 systems to serve as hosts to various poll-selected terminals and configure to support any protocol and custom modifications.

- Batch or Online EFT Network Switch Interface Systems provide software communications interfaces between S/3X, AS/400 or PS/2 and an ATM/PBM/POS network.

- Batch or Online EFT Network Switch Interface Systems provide software communication interfaces between a S/3X, AS/400 or PS/2 and an ATM/BPM/POS Network (over 100 networks supported for existing customers).

© INPUT 1995. Reproduction prohibited.

- DES-Mate External Encryption Device provides financial institutions with protection of both PINs and network encryption keys from unauthorized disclosure.

- Enhanced Problem Annunciator Product is an intelligent auto dialer programmed to report error conditions associated with an ITM installation or any other application software.

Support Services

Arkansas Systems' Continuing Support and Warranty Extension (CS &WE) program provides unlimited telephone assistance to enrolled clients. Assistance is offered over the phone through a customer service representative or through on-line diagnostics (dial-up error diagnostics). Support is available 24 hours a day, seven days a week.

CS &WE clients receive an extended warranty on the Arkansas Systems software and regular product upgrade release. This agreement is valid as long as the CS & WE fee is paid.

Arkansas Systems also provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing for the IBM computer environment.

Marketing and Sales

Arkansas Systems markets its products through direct sales, joint marketing agreements and an expanding distributor network.

Arkansas has more than ten distributors internationally.

Alliances

Arkansas Systems has business partnership agreements with IBM, InterBold and AT&T GIS.

Arkansas Systems is a National Solutions Provider and International Business Partner for IBM.

INPUT Assessment

Arkansas Systems considers itself an industry leader in the payment systems arena.

- The company is committed to providing products that continue to growth and will service the future needs of its customers.

- New technologies and methodologies in the payment industry are continuously added to the products.

- The company's latest growth can be linked into an increasing international presence.

A key challenge for Arkansas Systems is addressing the client/server arena as it relates to the financial services industry.

© INPUT 1995. Reproduction prohibited.

INPUT

COMPANY
PROFILE

ARKANSAS SYSTEMS, INC.

8901 Kanis Road
Little Rock, AR 72205
Phone: (501) 227-8471
Fax: (501) 227-5436

President:	Dr. James K. Hendren
Status:	Private Corporation
Total Employees:	100
Total Revenue:	$7,800,000
Fiscal Year End:	12/31/92

Key Points

- Arkansas Systems, Inc. offers software products for the midrange computer market.
- Over the past several years, Arkansas Systems has increased its focus on payment and financial transaction delivery systems to the banking and finance industry.
- A strong areas of business growth has been the international market. Approximately 40% of new business is international.

Copyright 1993 by INPUT. Reproduction Prohibited.

Company Description

Arkansas Systems, incorporated in 1975, provides software products and professional services for the IBM midrange systems. Products are currently provided primarily to the banking and finance industry.

Arkansas Systems currently has approximately 1,100 customers in 17 countries worldwide.

Strategy

Arkansas Systems' strategy is to market and support electronic banking products, including EFT and ATM products for midrange systems. Arkansas Systems is taking advantage of the growing use of IBM AS/400 systems in the finance market to get distributed systems out quickly to bigger banks.

Arkansas Systems is pursuing business worldwide, serving banks from Asia, Europe, as well as the U.S.

Arkansas Systems is developing new technologies in the areas of networking, image-based processing, fax integration, and electronic bill payment.

Financials

Arkansas Systems' 1992 revenue reached $7.8 million, a 20% increase over 1991 revenue of $6.5 million. A five-year revenue summary follows:

ARKANSAS SYSTEMS, INC.
FIVE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR				
ITEM	1992	1991	1990	1989	1988
Revenue	$7.8	$6.5	$6.5	$6.3	$5.0
· Percent increase from previous year	20%	--	2%	27%	20%

Alliances

Arkansas Systems is an Industry Application Specialist for IBM.

In March 1993, Arkansas Systems and IBM signed an agreement under IBM's Vendor Systems Installation Program to cooperate in developing an image-based remittance processing software application.

Copyright 1993 by INPUT. Reproduction Prohibited.

Employees

Arkansas Systems currently has 100 employees, segmented as follows:

Marketing and sales	12
Technical	68
General and administrative	20
	100

Key Products and Services

Approximately 85% of Arkansas Systems' 1992 revenue was derived from applications and systems software products, and the remaining 15% was derived from professional services.

Software marketed by Arkansas Systems operates on IBM System/3X, AS/400, and 370 architecture computers. A summary of current software product offerings is presented in the exhibit.

EXHIBIT

ARKANSAS SYSTEMS, INC. SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED	PRICING
Check Reconciliation System	1982	30	$500-$900
ATM On-line Management *(a)*	1981	550	$20,000-$45,000
ATM Network (Switch) Interface *(a)*	1982	450	$17,000-$35,000
Banking Customer Information System (CIS)	1981	20	$6,500
MICR/Proof Interface *(a)*	1984	50	$7,000-$15,500
Teller Terminal Management System *(a)*	1982	125	$12,500-$35,000
Flexi-Net	1988	15	(b)
Flexi-Check	1988	75	$13,000-$90,000
Flexi-Node	1988	10	(b)
Flexi-Remittance	1989	10	(b)
Telephone and Business Banking System	1988	30	$14,500-$45,000
Tele-Banking System	1988	35	$14,500
World Class Network Software	1989	4	$55,000-$80,000
Integrated Transaction Management (ITM)	1991	80	$30,000-$500,000
PATH Communication Controllers	1985	400	$6,000-$10,000
CICS/400 - CICS/COBOL migration tool	1989	10	$100,000-$150,000

(a) Software operates on IBM System 34/36/38 running SSP or CPF operating systems.

(b) Pricing is dependent on the features selected.

Copyright 1993 by INPUT. Reproduction Prohibited.

Arkansas Systems offers a series of products for on-line banking applications. Pricing for these systems depends on the IBM host, type and model, protocol requirements, and device or network selected. The products are designed for use on IBM System 34/36/38, AS/400, and 370 architecture processors.

- Flexi-Net offers communication and application support for networking one or more types of ATM and/or POS devices together with multiple EFT networks. Flexi-Net performs all required transaction switching and reformatting and presents the host with a single communications protocol and transaction image. The system allows an IBM S/3X, AS/400, or S/370 machine to serve as a front end or distributed network node in a larger network.

- Flexi-Check offers support of selected check applications, data capture and processing, cycle sort and exception-item pull, on-line fine sort, extensive account analysis, and account reconciliation.

- Flexi-Remittance is a full-featured remittance processing system for IBM's family of high-speed 389X-XP Document Processors and AS/400 architecture. The system supports a variety of processing workflows and item volumes. Features include high-speed, single-pass OCR/MICR item capture, endorsement, microfilming, on-line indexing, sorting, power encoding, on-screen and hard-copy reporting, cash letter generation, and image capability.

- Flexi-Node offers a remote node for an on-line banking system that can support ATMs, teller terminals, reader/sorters, and office automation.

Other bank products include the following:

- Telephone and Business Banking System offers complete communication and application support for an on-line touch-tone phone and asynchronous terminal inquiry and transaction origination system.

- The Tele-Banking System provides customers with 24-hour access to account balances and selected other information. The system is accessed via any touch-tone telephone. The system can support up to eight separate telephone lines per module and can control several calls independently. The system runs on IBM AS/400, S/34/36/38, 9370, 43XX, and 370 architecture processors.

- The Teller Terminal Management System provides on-line communications between an IBM system and teller terminals in order to use current account data for transaction authorizations and to update account data on transactions that take place.

Copyright 1993 by INPUT. Reproduction Prohibited.

- Integrated Transaction Management provides integrated support for customers, network connections, self-service, and attended devices. The system, which runs on an IBM AS/400, supports ATM, POS, Teller, Voice, PC, FAX, check equipment, and debit and credit networks. This single unified system provides transaction authorization, bill payment, and access to information by any method selected. The different modules interact extensively, providing enhanced customer service.

Other products include the following:

- World Class Network Software (WCNS) is a family of telecommunications switch products designed to support local, regional, national, and international EFT networks. WCNS software operates on IBM's AS/400 processor. The WCNS family includes Bronze-Net, Silver-Net, and Gold-Net.

- PATH communications controllers allow S/36, S/38, and AS/400 systems to serve as hosts to various poll-selected terminals and configure to support any protocol and custom modifications.

- CICS/400 is a flexible migration tool that converts existing CICS-level COBOL applications from IBM S/370 architecture mainframe computers to the IBM AS/400 computer.

Arkansas Systems provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing for the IBM computer environment.

Industry Markets

Arkansas Systems derived 1992 revenue from the following industry sectors:

Banking and finance	95%
State and local government	5%
	100%

Geographic Markets

Approximately 75% of 1992 revenue was derived from the U.S. The remaining 25% was derived from international sources.

Outside the U.S., Arkansas Systems has clients in 16 countries.

Three of the 20 largest Japanese banks are Arkansas Systems' clients.

Copyright 1993 by INPUT. Reproduction Prohibited.

ARKANSAS SYSTEMS, INC.
8901 Kanis Road
Little Rock, AR 72205
(501) 227-8471

Dr. James K. Hendren, President
Private Corporation
Total Employees: 115
Total Revenue, Fiscal Year End
12/31/90: $6,500,000

The Company

Arkansas Systems, Inc. (ASI), incorporated in 1975, provides software products and professional services for the IBM minicomputer environment.

ASI's 1990 revenue reached $6.5 million, a 2% increase over 1989 revenue of $6.35 million. A three-year revenue summary follows:

ARKANSAS SYSTEMS, INC.
THREE-YEAR REVENUE SUMMARY
($ millions)

	FISCAL YEAR		
ITEM	1990	1989	1988
Revenue	$6.50	$6.35	$5.00
• Percent increase from previous year	2%	27%	20%

As of December 31, 1990, ASI had 115 employees, segmented as follows:

Marketing and sales	8
Technical	87
General and administrative	20
	115

Key Products and Services

Approximately 75% of ASI's 1990 revenue was derived from applications and systems software products, and the remaining 25% was derived from professional services.

Software marketed by ASI operates on IBM System/3X, AS/400, and 370 architecture computers. A summary of current software product offerings is presented in the exhibit.

Copyright 1991 by INPUT. Reproduction Prohibited.

EXHIBIT

ARKANSAS SYSTEMS, INC.
SOFTWARE PRODUCTS

PRODUCT	YEAR INTRODUCED	NUMBER INSTALLED	PRICING
PATH Communication Controllers	1980	200	$6,000-$10,000
File Transmission Utility (FTU)	1981	100	$395
Library Transmission Utility (LTU)	1982	100	$395
RPG Generator	1984	10	$2,295-$3,300
CICS/400 - CICS/COBOL migration tool	1989	4	$100,000-$150,000
Customer Information System (CIF)	1983	10	$2,500-$6,500
Check Reconciliation System	1982	30	$500-$900
Fuel Tax Reporting System	1982	4	$2,900-$4,900
Time Accounting System	1982	5	$5,000-$8,000
ATM On-line Management *(a)*	1981	450	$20,000-$45,000
ATM Network (Switch) Interface *(a)*	1982	450	$17,000-$35,000
Banking Customer Information System (CIS)	1981	20	$6,500
MICR/Proof Interface *(a)*	1984	40	$7,000-$15,500
Teller Terminal Management System *(a)*	1982	75	$12,500-$35,000
Safe Deposit Box Management System *(a)*	1984	14	$3,000-$4,500
Stockholder Information System	1984	10	$4,800-$6,500
Flexi-Net	1988	8	(b)
Flexi-Check	1988	50	$13,000-$90,000
Flexi-Node	1988	8	(b)
Flexi-Remittance	1989	5	(b)
Telephone and Business Banking System	1988	10	$14,500-$45,000
Tele-Banking System	1988	5	$14,500
Trust Systems	1988	25	$15,000-$135,000
World Class Network Software	1989	1	$55,000-$80,000

(a) Software operates on IBM System 34/36/38 running SSP or CPF operating systems.

(b) Pricing is dependent on the features selected.

Major products include the following:

- CICS/400 is a flexible migration tool that converts existing CICS-level COBOL applications from IBM S/370 architecture mainframe computers to the IBM AS/400 computer.
- World Class Network Software (WCNS) is a family of telecommunications switch products designed to support local, regional, national, and international EFT networks. WCNS software operates on IBM's AS/400 processor. The WCNS family includes Bronze-Net, Silver-Net, and Gold-Net.
- ASI offers a series of products for on-line banking applications. Pricing for these systems depends on the IBM host, type and model, protocol requirements, and device or network selected.

Copyright 1991 by INPUT. Reproduction Prohibited.

The products are designed for use on IBM System 34/36/38, AS/400, and 370 architecture processors.

- Flexi-Net offers communication and application support for networking one or more types of ATM and/or POS devices together with multiple EFT networks. Flexi-Net performs all required transaction switching and reformatting and presents the host with a single communications protocol and transaction image. The system allows an IBM S/3X, AS/400, or S/370 machine to serve as a front end or distributed network node in a larger network.

- Flexi-Check offers support of selected check applications, data capture and processing, cycle sort and exception-item pull, on-line fine sort, extensive account analysis, and account reconciliation.

- Flexi-Remittance is a full-featured remittance processing system for IBM's family of high-speed 389X-XP Document Processors and AS/400 architecture. The system supports a variety of processing workflows and item volumes. Features include high-speed, single-pass OCR/MICR item capture, endorsement, microfilming, on-line indexing, sorting, power encoding, on-screen and hard-copy reporting, cash letter generation, and image capability.

- Flexi-Node offers a remote node for an on-line banking system that can support ATMs, teller terminals, reader/sorters, and office automation.

- Telephone and Business Banking System offers complete communication and application support for an on-line touch-tone phone and asynchronous terminal inquiry and transaction origination system.

- The Tele-Banking System provides customers with 24-hour access to account balances and selected other information. The system is accessed via any touch-tone telephone. The system can support up to eight separate telephone lines per module and can control several calls independently. The system runs on IBM AS/400, S/34/36/38, 9370, 43XX, and 370 architecture processors.

- The Personal Trust Accounting System offers an on-line, multi-bank system designed for high-volume trust processing. The Corporate Trust Management System features accounting and reporting for bearer bonds, fully registered issues, and stock transfers. It maintains records to provide full payment control

Copyright 1991 by INPUT. Reproduction Prohibited.

for coupons and registered bonds, as well as dividends and dividend reinvestment.

- Further complementary trust systems include Transfer and Coupon Bond.

- The Trust Systems run on IBM S/3X, AS/400, and 370 architecture processors. The pricing ranges from $10,000 to $400,000 depending on the processor and the complementary systems included.

- The Teller Terminal Management System provides on-line communications between an IBM system and teller terminals in order to use current account data for transaction authorizations and to update account data on transactions that take place.

ASI provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing for the IBM computer environment.

Industry Markets

ASI derived 1990 revenue from the following industry sectors:

Banking and finance	75%
Distribution/retail	15%
Medical	5%
State and local government	5%
	100%

Geographic Markets

Approximately 90% of 1990 revenue was derived from the U.S. The remaining 10% was derived from international sources.

Computer Hardware and Software

ASI has the following hardware installed:

- 1 IBM 9370
- 2 IBM AS/400s
- 1 IBM System 34, SSP
- 3 IBM System 36s, SSP
- 40 IBM PC, PC/XTs, MDOS

Copyright 1991 by INPUT. Reproduction Prohibited.

ARKANSAS SYSTEMS, INC.
8901 Kanis Road
Little Rock, AR 72205
(501) 227-8471

Dr. James K. Hendren, President
Private Corporation
Total Employees: 115
Total Revenue, Fiscal Year End
12/31/89: $6,350,000

The Company

Arkansas Systems, Inc. (ASI), incorporated in 1975, provides software products and professional services for the IBM minicomputer environment.

ASI's 1989 revenue reached nearly $6.4 million, a 27% increase over 1988 revenue of $5 million. INPUT estimates that ASI's average annual revenue growth rate has been approximately 20% per year for the past three years.

As of December 31, 1989, ASI had 115 employees, segmented as follows:

Marketing and sales	8
Technical	87
General and administrative	20
	115

Key Products and Services

Approximately 75% of ASI's 1989 revenue was derived from applications and systems software products, and the remaining 25% was derived from professional services.

Software marketed by ASI operates on IBM System 3X, AS/400, and 370 Architecture computers. A summary of current software product offerings is presented in the exhibit.

Copyright 1990 by INPUT. Reproduction Prohibited.

EXHIBIT

ARKANSAS SYSTEMS, INC.
SOFTWARE PRODUCTS

APPLICATION AREA/PRODUCT NAME	YEAR INTRODUCED	NUMBER INSTALLED	PRICING
File Management Aid (FMA)	1981	10	$1,250
File Transmission Utility (FTU)	1981	100	$395
Library Transmission Utility (LTU)	1982	100	$395
RPG Generator	1984	10	$450
Accounting Information Management System (AIMS) *(a)*	1982	90	$12,000-$25,000
Customer Information System (CIF)	1983	4	$2,900
Check Reconciliation System	1982	30	$500
Fuel Tax Reporting System	1982	3	$1,900
Time Accounting System	1982	5	$4,950
Trucking	1982	1	$20,000
Wholesale Drug Software	1982	1	$20,000-$29,000
ATM On-line Management *(b)*	1981	400	$20,000-$45,000
ATM Network (Switch) Interface *(b)*	1982	400	$17,000-$35,000
Banking Customer Information System (CIS)	1981	20	$5,000
MICR/Proof Interface *(b)*	1984	10	$7,000-$15,500
On-line Banking Environment Teller Terminal Management *(b)*	1982	25	$12,500-$35,000
Safe Deposit Box Management System *(b)*	1984	10	$1,200-$4,000
Stockholder Information System	1984	10	$2,800-$6,000
Flex-Net	1988	New	(c)
Flexi-Check	1988	50	$13,000-$90,000
Flexi-Node	1988	New	(c)
Telephone and Business Banking System	1988	3	$14,500-$45,000
Tele-Banking System	1988	3	$14,500
Trust Systems	1988	25	$15,000-$135,000

(a) Software operates on IBM System 23/36, AS/400.

(b) Software operates on IBM System 34/36/38 running SSP or CPF operating systems.

(c) Pricing is dependent on the features selected.

ASI has recently made the following product introductions:

- ASI offers a series of products for on-line banking applications. Pricing for these systems depends on the IBM host, type and model, protocol requirements, and device or network selected. The products are designed for use on IBM System 34/36/38, AS/400, and 370 Architecture processors.

 - Flexi-Net offers communication and application support for networking one or more types of ATM and/or POS devices together with multiple EFT networks. Flexi-Net performs all required transaction switching and reformatting and presents the host with a single communications protocol and

Copyright 1990 by INPUT. Reproduction Prohibited.

transaction image. The system allows an IBM S/3X, AS/400, or S/370 machine to serve as a front end or distributed network node in a larger network.

- Flexi-Check offers support of selected OCR and remittance applications, data capture and processing, cycle sort and exception-item pull, on-line fine sort, extensive account analysis, and account reconciliation.

- Flexi-Node offers a remote node for an on-line banking system that can support ATMs, teller terminals, reader/sorters, and office automation.

- Telephone and Business Banking System offers complete communication and application support for an on-line touch-tone phone and asynchronous terminal inquiry and transaction origination system.

- The Tele-Banking System provides customers with 24-hour access to account balances and selected other information. The system is accessed via any touch-tone telephone. The system can support up to eight separate telephone lines and can control several calls independently. The system runs on IBM AS/400, S/34/36/38, 9370, 43XX, and 370 Architecture processors.

- The Trust Systems offered by ASI offer full on-line inquiry to all master files, immediate editing of files, on-line blotter, beneficiary disbursements, sweep-of-excess cash to money market, common trust fund processing, CUSIP change, DTC reconciliation reports, various disbursement methods, fee calculations, real estate processing, bond maturities, security movement and control, master-note accounting, tax worksheets, interface to tax service, and 1099 IRS processing. Complementary systems to the base-trust system include:

 - Employee Benefit Trust is for trust departments requiring participant accounting for pension and profit sharing.

 - Contract Collections is an accounting and reporting package developed for both commercial and trust banking. The system is designed for departments which function as agents for controlling the receipt and disbursement of funds among persons entering contractual agreements.

 - Land Trust is for trust departments in states that allow land trusts.

 Copyright 1990 by INPUT. Reproduction Prohibited.

- Further complementary trust systems include Transfer, Coupon Bond, Farm Management, and Tenant Receivables.

- The Trust Systems run on IBM S/3X, AS/400, and 370 Architecture processors. The pricing ranges from $10,000 to $400,000 depending on the processor and the complementary systems included.

ASI provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing for the IBM computer environment.

Industry Markets

ASI derived 1989 revenue from the following industry sectors:

Banking and finance	75%
Distribution	15%
Medical	5%
State and local government	5%
	100%

Geographic Markets

Approximately 90% of 1989 revenue was derived from the U.S. The remaining 10% was derived from international sources.

Computer Hardware and Software

ASI has the following hardware installed:

- 1 IBM 9370
- 1 IBM AS/400
- 1 IBM System 34, SSP
- 1 IBM System 36, SSP
- 40 IBM PC, PC/XT's, MDOS

Copyright 1990 by INPUT. Reproduction Prohibited.

ARKANSAS SYSTEMS, INC.
8901 Kanis Road
Little Rock, AR 72205
(501) 227-8471

Dr. James K. Hendren, President
Private Corporation
Total Employees: 100
Total Revenue, Fiscal Year End
12/31/88: $5,000,000

The Company

Arkansas Systems, Inc. (ASI), incorporated in 1975, provides software products and professional services for the IBM minicomputer environment.

ASI's 1988 revenue reached $5 million. INPUT estimates that ASI's average annual revenue growth rate has been approximately 20% per year for the past three years.

As of December 31, 1988, ASI had 100 employees, segmented as follows:

Marketing and sales	8
Technical	72
General and administrative	20
	100

Key Products and Services

Approximately 75% of ASI's 1988 revenue was derived from application and systems software products, and the remaining 25% was derived from professional services.

Software marketed by ASI operates on IBM System 3X, AS/400, and 370 Architecture computers. A summary of current software product offerings is presented in the exhibit.

Copyright 1989 by INPUT. Reproduction Prohibited.

EXHIBIT

ARKANSAS SYSTEMS, INC.
SOFTWARE PRODUCTS

APPLICATION AREA/PRODUCT NAME	YEAR INTRODUCED	NUMBER INSTALLED	PRICING
File Management Aid (FMA)	1981	10	$1,250
File Transmission Utility (FTU)	1981	100	$395
Library Transmission Utility (LTU)	1982	100	$395
RPG Generator	1984	10	$450
Accounting Information Management System (AIMS) *(a)*	1982	90	$12,000-$25,000
Customer Information System (CIF)	1983	4	$2,900
Check Reconciliation System	1982	30	$500
Fuel Tax Reporting System	1982	3	$1,900
Time Accounting System	1982	5	$4,950
Trucking	1982	1	$20,000
Wholesale Drug Software	1982	1	$20,000-$29,000
ATM On-line Management *(b)*	1981	200	$20,000-$45,000
ATM Network (Switch) Interface *(b)*	1982	200	$17,000-$35,000
Automated Trust Accounting System (ATAS) *(b)*	1978	80	$15,000-$135,000
Banking Customer Information System (CIS)	1981	20	$5,000
MICR/Proof Interface *(b)*	1984	10	$7,000-$15,500
On-line Banking Environment Teller Terminal Management *(b)*	1982	25	$12,500-$35,000
Safe Deposit Box Management System *(b)*	1984	10	$1,200-$4,000
Stockholder Information System	1984	10	$2,800-$6,000
Flex-Net	1988	New	(c)
Flexi-Check	1988	New	$13,000-$90,000
Flexi-Node	1988	New	(c)
Telephone and Business Banking System	1988	New	$14,500-$45,000
Tele-Banking System	1988	New	(c)
Trust Systems	1988	New	(c)

(a) Software operates on IBM System 23/36, AS/400.

(b) Software operates on IBM System 34/36/38 running SSP or CPF operating systems.

(c) Pricing is dependent on the features selected.

ASI has recently made the following product introductions:

- ASI offers a series of products for on-line banking applications. Pricing for these systems depends on the IBM host, type and model, protocol requirements, and device or network selected. The products are designed for use on IBM System 34/36/38, AS/400, and 370 Architecture processors, but all products are not currently available for all host types.

 - Flexi-Net offers communication and application support for networking one or more types of ATM and/or POS devices together with multiple EFT networks. Flexi-Net performs all

Copyright 1989 by INPUT. Reproduction Prohibited.

required transaction switching and reformatting and presents the host with a single communications protocol and transaction image. The system allows an IBM S/3X, AS/400, or S/370 machine to serve as a front end or distributed network node in a larger network.

- Flexi-Check offers support of selected OCR and remittance applications, data capture and processing, cycle sort and exception-item pull, on-line fine sort, extensive account analysis, and account reconciliation.

- Flexi-Node offers a remote node for an on-line banking system that can support ATM's, teller terminals, reader/sorters, and office automation.

- Telephone and Business Banking System offers complete communication and application support for an on-line touch-tone phone and asynchronous terminal inquiry and transaction origination system.

- The Tele-Banking System provides customers with 24-hour access to account balances and selected other information. The system is accessed via any touch-tone telephone. The system can support up to eight separate telephone lines and can control several calls independently. The system runs on IBM AS/400, S/34/36/38, 9370, 43XX, and 370 Architecture processors.

- The Trust Systems offered by ASI offer full on-line inquiry to all master files, immediate editing of files, on-line blotter, beneficiary disbursements, sweep-of-excess cash to money market, common trust fund processing, CUSIP change, DTC reconciliation reports, various disbursement methods, fee calculations, real estate processing, bond maturities, security movement and control, master-note accounting, tax worksheets, interface to tax service, and 1099 IRS processing. Complementary systems to the base-trust system include:

 - Employee Benefit Trust is for trust departments requiring participant accounting for pension and profit sharing.

 - Contract Collections is an accounting and reporting package developed for both commercial and trust banking. The system is designed for departments which function as agents for controlling the receipt and disbursement of funds among persons entering contractual agreements.

Copyright 1989 by INPUT. Reproduction Prohibited.

- Land Trust is for trust departments in states that allow land trusts.

- Further complementary trust systems include: Transfer, Coupon Bond, Farm Management, and Tenant Receivables.

- The Trust Systems run on IBM S/3X, AS/400, and 370 Architecture processors. The pricing ranges from $10,000 to $400,000 depending on the processor and the complementary systems included.

ASI provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing for the IBM computer environment.

Industry Markets

ASI derived 1988 revenue from the following industry sectors:

Banking and finance	75%
Distribution	15%
Medical	5%
State and local government	5%
	100%

Geographic Markets

Approximately 90% of 1988 revenue was derived from the U.S., the remaining 10% was derived from international sources.

Computer Hardware and Software

ASI has the following hardware installed:

- 1 IBM 9370
- 1 IBM AS/400
- 1 IBM System 34, SSP
- 1 IBM System 36, SSP
- 2 IBM Displaywriters
- 40 IBM PC, PC/XT's, MDOS

Copyright 1989 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

ARKANSAS SYSTEMS, INC.
8901 Kanis Road
Little Rock, AR 72205
(501) 227-8471

Dr. James K. Hendren, President
Private Corporation
Total Employees: 54
Total Revenue, Fiscal Year End
12/31/85: $3,000,000

THE COMPANY

- Arkansas Systems (ASI), incorporated in 1975, provides software products and professional services for the IBM minicomputer environment.

- INPUT estimates that 1985 revenue reached $3 million. INPUT estimates that ASI's average revenue growth rate has been 40% per year for the past three years.

- As of February 1986, ASI had 54 employees, segmented as follows:

Marketing/sales	3
Technical	37
General and administrative	14
	54

KEY PRODUCTS AND SERVICES

- Approximately 60% of 1985 revenue was derived from software products (75% from application software, 5% from system software, and 20% from maintenance and installation services). The remaining 40% was derived from professional services (80% software development and 20% consulting).

- Software marketed by ASI operates on IBM System 34 and System 36 computers running the SSP operating system except as noted in the exhibits.

 - ASI developed and currently markets 28 software products as shown in Exhibit A.

 - ASI is also the exclusive distributor of software developed by Healthcare Software Systems, Inc. and Vanarsdale Associates, Inc. ASI is the exclusive regional distributor of software developed by Bancroft Computer Systems and DARCOR. Exhibit B lists the products distributed by ASI.

- ASI provides custom software development and consulting services primarily in the areas of telecommunications and distributed processing for the IBM computer environment.

©1986 by INPUT. Reproduction Prohibited.

EXHIBIT A

ARKANSAS SYSTEMS, INC.
SOFTWARE PRODUCTS

APPLICATION AREA/PRODUCT NAME	YEAR INTRODUCED	NUMBER INSTALLED	PRICING
ASI Cross Reference System	1982	5	$195
File Management Aid (FMA)	1981	10	$1,250
File Transmission Utility (FTU)	1981	15	$95/CPU
Library Transmission Utility (LTU)	1982	35	$95/CPU
RPG Generator	1984	5	$450
User Library Analysis (ULA)	1981	10	$200/CPU
Accounting Information Management System (AIMS)*	1982	45	$6,000–$12,000
Advertising Agency Software	1982	1	$17,500
Customer Information System	1983	1	$2,500
Check Reconciliation System	1982	3	$500
Fuel Tax Reporting System	1982	3	$1,500
Investment Management System	1982	1	$3,000
Oil and Gas Leasing System	1982	1	$20,000
Time Accounting System	1982	5	$950
Trucking	1982	1	$20,000
Wholesale Drug Software	1982	1	$20,000–$29,000
Broiler Cost Accounting and Settlement System	1982	3	$4,000
Poultry Egg Projection and Management System	1982	3	$2,500
Poultry Hatchery Management System	1984	1	$3,000
Pullet/Layer Cost Accounting and Settlement System	1982	3	$4,000
ATM On-line Management+	1981	50	$15,000–$21,500
ATM Network (Switch) Interface+	1982	65	$7,000–$13,500
Automated Trust Accounting System (ATAS)+	1978	27	$10,000–$15,000
Banking Customer Information System (CIS)	1981	20	$5,000
MICR/Proof Interface+	1984	10	$7,000–$15,500
On-line Banking Environment Teller Terminal Management+	1982	25	$15,000–$19,500
Safe Deposit Box Management System+	1984	10	$950–$1,500
Stockholder Information System	1984	10	$2,500

*Software operates on IBM System 23/36.
+Software operates on IBM System 34/36/38 running SSP or CPF operating systems.

©1986 by INPUT. Reproduction Prohibited.

EXHIBIT B

ARKANSAS SYSTEMS, INC.

THIRD PARTY SOFTWARE PRODUCTS

APPLICATION AREA/PRODUCT NAME	YEAR INTRODUCED	NUMBERS INSTALLED	PRICING
Bancroft Computer Systems			
• Bancroft Accounts Payable System	1977	425	$2,600
• Bancroft Multicompany, Multistate Payroll*	1975	325	$1,900
• Bancroft 34/36 Multicompany, Multistate Payroll	1985	New	$2,500
• Bancroft Multicompany Versatile Pay Management System	1980	120	$3,500
DARCOR			
• DARCOR Accounts Receivable	1978	77	$2,800
• DARCOR Distribution and Service Management System	1978	100	$12,400
• DARCOR Equipment Rental Management System	1983	6	$17,500-$20,000
• DARCOR Fixed Assets Management System	1983	20	$2,800
• DARCOR General Ledger/Accounts Payable System	1978	110	$3,600
• DARCOR Payroll	1978	85	$2,800
Healthcare Software Systems, Inc.			
• ASI Medical Practice Accounting System (MPAS)	1978	205	$3,995-$13,000
Vanarsdale Associates, Inc.			
• System 34/36 Computer Resource Accounting and Analysis+	1982	35	$1,000-$2,000

*Software operates on IBM PC or IBM System 34/36
+Software operates on IBM PC-XT or IBM System 23/36

©1986 by INPUT. Reproduction Prohibited.

INDUSTRY MARKETS

- ASI derived 1985 revenue from the following industry sectors:

Banking and finance	60%
Distribution	25
Medical	10
State and local government	5
	100%

GEOGRAPHIC MARKETS

- Approximately 96% of 1985 revenue was derived from the U.S., 2% from Europe, and the remaining 2% from other countries.
- ASI maintains a branch office in Fayetteville (AK).

COMPUTER HARDWARE

- ASI has the following hardware installed:
 - 1 IBM System 34, SSP.
 - 1 IBM System 36, SSP.
 - 2 IBM Displaywriters.
 - 10 IBM PC, PC/XTs, MDOS.

©1986 by INPUT. Reproduction Prohibited.

ARMOR SYSTEMS, INC.
324 North Orlando Avenue
Maitland, FL 32751
(407) 629-0753

Richard Bourgie, President and CEO
Private Corporation
Total Employees: 100
Total Revenue, Fiscal Year End
12/31/88: $10,000,000*

* INPUT estimate

The Company

Armor Systems, Inc. (Armor) provides microcomputer-based software for accounting and retail management functions. The company was founded in 1978 as a systems house, selling hardware and custom software. In 1983, Armor introduced its first modular accounting software product for general applications, Excalibur Series[R].

INPUT estimates that Armor's revenue has remained relatively stable from 1985 through 1989 at approximately $10 million annually.

Armor currently employs 100 people.

Key Products and Services

One hundred percent of Armor's 1988 revenue was derived from its microcomputer-based software products and associated support services.

In 1988 Armor released Excalibur+ Premier[TM], an updated version of its Excalibur business software.

- Excalibur+ Premier is an integrated 13-module business management system with built-in networking, multiuser and multitasking capabilities.
- The product is written in C.
- Excalibur+ Premier runs on most major hard-disk microcomputers and is compatible with a variety of operating systems and networks.
- Modules available include Accounts Payable, Accounts Receivable, Billing, General Ledger, Inventory Control, Job Cost, Order Entry, Payroll, Point of Sale, Quicksale, and Purchase Orders (all retail priced at $695 per module), and

Copyright 1989 by INPUT. Reproduction Prohibited.

Customer Information/DataBase Management and Bank Reconciliation (retail priced at $395). Special dealer pricing and dealer volume discounts are available.

- Excalibur+ Premier allows up to 32 users in a network environment to access the same file.
- Armor offers an Import Data Utility to transfer ASCII files from third-party sources (e.g., catalog update services and productivity programs) into Excalibur+ Premier.
- The company also offers a report generator to provide Excalibur+ Premier users with customized reports.

In October of 1988, Armor introduced E+BASIC Retail Management and General Accounting systems for smaller businesses.

- E+BASIC Retail Management System provides point of sale, accounts receivable, and inventory control billing capabilities; prints price, shelf, and mailing labels; automatically computes FIFO, LIFO, and average cost; automatic cash drawer balancing; custom-report formatting; and bar-code reader support.
- E+BASIC General Accounting provides general ledger, accounts payable, and payroll applications.
- E+BASIC can be used with up to 12 workstations or check-out counters. Network compatibility is also available.
- E+BASIC is designed to be used by smaller retail and service businesses.
- The E+BASIC system is priced at $695.

Armor provides various dealer and user-support services as follows:

- The Dealer Advantage Program provides dealer instruction relating to Armor products and marketing techniques, telephone support, newsletters, and point-of-purchase materials for specific vertical markets to its 3,000 dealer network.
- The Customer Assistance Program is designed to provide end users with additional technical and operational assistance over the telephone.

Copyright 1989 by INPUT. Reproduction Prohibited.

- On-line support and on-line demonstrations are also available to computer resellers.
- Armor provides dealers with a 90-day Risk-Free Guarantee that provides full refunds of dealer costs if a client returns his installed product within 90 days of purchase.

Industry Markets

Armor's products are sold to small-to medium-sized businesses in the following industry sectors: retail distribution, wholesale distribution, discreet manufacturing, services, construction, and hospitality.

Geographic Markets

Approximately 99% of Armor's 1988 revenue was derived from the U.S. The remaining 1% was derived from Canada.

Computer Hardware and Software

Armor uses a variety of microcomputers installed for research and development and customer support.

Copyright 1989 by INPUT. Reproduction Prohibited.

COMPANY PROFILE

ARMOR SYSTEMS, INC.
324 North Orlando Avenue
Maitland, FL 32751
(305) 629-0753

Nick Barth, Chairman
Richard Bourgie, President
Private Corporation
Total Employees: 120
Total Revenue, Fiscal Year End 12/31/85: $10,000,000*

THE COMPANY

- Armor Systems, Inc. provides microcomputer accounting software for all industries. The company was founded in 1978 as a systems house, selling hardware and custom software. Over the next four years, Armor accumulated a library of custom software packages for specific vertical markets. These products were subsequently reworked into the 11-module Excalibur Series® which was introduced in April 1983 as an integrated application software product.

- INPUT estimates that Armor's 1985 revenue reached $10 million, compared to 1984 revenue of $7 million and 1983 revenue of $1 million.

- Armor currently has 120 employees.

KEY PRODUCTS AND SERVICES

- One hundred percent of Armor's 1985 revenue was derived from microcomputer-based accounting software products and associated support services.

- Armor's first application software product, the Excalibur Series, was introduced in 1983. Certain configurations of this 11-module product give it the capability to function as "custom software" for a variety of businesses and industries.

 - Excalibur Series software runs on a variety of 8- and 16-bit microcomputers with 64K per terminal.

 - Modules include General Ledger, Accounts Receivable, Payroll, Accounts Payable, Inventory, Billing, Counter Sales, Order Entry, Work in Process (all retail priced at $595 per module), Customer Information, and Depreciation (retail priced at $295 per module). Special dealer pricing and dealer volume discounts are available.

 - There are currently over 40,000 installations of the Excalibur Series product.

*INPUT estimate

©1986 by INPUT. Reproduction Prohibited.

- In 1984 Armor introduced Excalibur Plus® a 12-module accounting software product with built-in networking, multi-user, and multi-tasking capabilities.
 - The product uses Armor's proprietary ARC® fourth-generation programming language and is compatible with a variety of productivity programs, such as Lotus' 1-2-3 and Symphony and Ashton-Tate's dBASE and Framework.
 - Excalibur Plus runs on over 80 16-bit hard disk microcomputers and is compatible with a variety of operating systems, including XENIX and UNIX.
 - Modules available include General Ledger, Accounts Payable, Payroll, Accounts Receivable, Inventory Control, Purchase Orders, Billing, Point-of-Sale, Order Entry, Job Cost/Work in Process (all retail priced at $695 per module), Customer Information/Data Base Management, and Fixed Assets (retail priced at $395 per module). Special dealer pricing and dealer volume discounts are available.
 - To date, there have been over 1,200 Excalibur Plus installations.
- Armor's most recent product, Bravo, was introduced in early 1986. Bravo is a microcomputer-based accounting application designed for retail management and point-of-sale environments. This integrated product targets organizations that are automating for the first time. Bravo provides accounts receivable, point-of-sale, billing, and inventory functions and retails for $695.
- Armor provides various dealer and user support services as follows:
 - The Dealer Advantage Program (DAP) provides dealer instruction relating to Armor products and marketing techniques, telephone support, newsletters, and point-of purchase materials for specific vertical markets.
 - The Customer Assistance Program is designed to provide end users with additional technical and operational assistance via telephone.

INDUSTRY MARKETS

- Armor's software products are marketed through a network of dealers, including independent retail stores and retail chains.
- Armor's products are used by virtually all industries, primarily manufacturing, retail and wholesale distribution, and services such as CPAs, restaurants, and recreational organizations.

GEOGRAPHIC MARKETS

- Approximately 95% of Armor's 1985 revenue was derived from the U.S. The remaining 5% was derived from Canada.

©1986 by INPUT. Reproduction Prohibited.

COMPUTER HARDWARE

- Armor has a variety of microcomputers installed for research and development and customer support.

©1986 by INPUT. Reproduction Prohibited.